

Progress Updates

DATE: DECEMBER 10, 1993
 TO: JIM THOMPSON
 FROM: LAURA DAMON *LJD*
 SUBJECT: SULFIDE TEST HEAP UPDATE - NOVEMBER 1993

* RECOVERY

As of November 30, 1993, the Sulfide Test Heap (STH-5) has been on leach for 431 days. STH is showing a "Total Gold Basis" recovery of 50.0% and a "Recoverable Gold Basis" recovery of 91.4%.

Date	Leach Day	% Au Rec Actual	% Au Rec Predicted	% Au Rec Actual	% Au Rec Predicted
		Total Basis		Recoverable Basis	
10/26/92	31	15.2	14	27.8	25
11/26/92	62	24.5	22	44.8	40
12/26/92	92	29.5	29	54.0	53
01/26/93	123	33.6	33	61.4	60
02/26/93	154	34.1	36	62.3	66
03/26/93	182	35.4	39	64.8	71
04/26/93	213	37.6	41	68.7	75
05/26/93	243	39.2	43	71.7	78
06/26/93	274	40.6	45	74.3	81
07/26/93	304	42.1	46	77.0	83
08/26/93	335	45.8	47	83.8	85
09/26/93	366	47.7	48	87.3	87
10/26/93	396	48.9	48	89.5	89
11/26/93	427	49.9	49	91.2	90

After 14 months on leach the Sulfide Test Heap has attained 50% recovery on "Total Gold" basis and 91% recovery on "Recoverable Gold" basis. Regression analysis was performed on three models from the data points showing extrapolated gold extraction values at two years of 57.0%, 61.7% and 61.8%.

* STH-5 EFFLUENT

Date	Leach Day	pH	NaCN Consumption (lb/Ton Ore)
09/30/92	5	7.4	.043
10/31/92	36	8.0	.402
11/30/92	66	7.9	.676
12/31/92	97	8.2	.917
01/31/93	128	8.7	1.127
02/28/93	156	8.6	1.233
03/31/93	187	8.8	1.341
04/30/93	217	8.8	1.458
05/31/93	248	8.9	1.559
06/30/93	278	8.8	1.646
07/31/93	309	8.2	1.751
08/31/93	340	8.0	1.951
09/30/93	370	8.4	2.118
10/31/93	401	8.5	2.264
11/30/93	431	8.9	2.410

STH-5 pH at 8.9, has continued to climb since the side slope influence has tapered off. NaCN consumption decreases as pH increases.

*COST

To Date Expense: \$479787.92

\$/Ton Ore: \$12.09 (May be somewhat higher with
\$/Oz Prod: \$372.72 added processing costs)

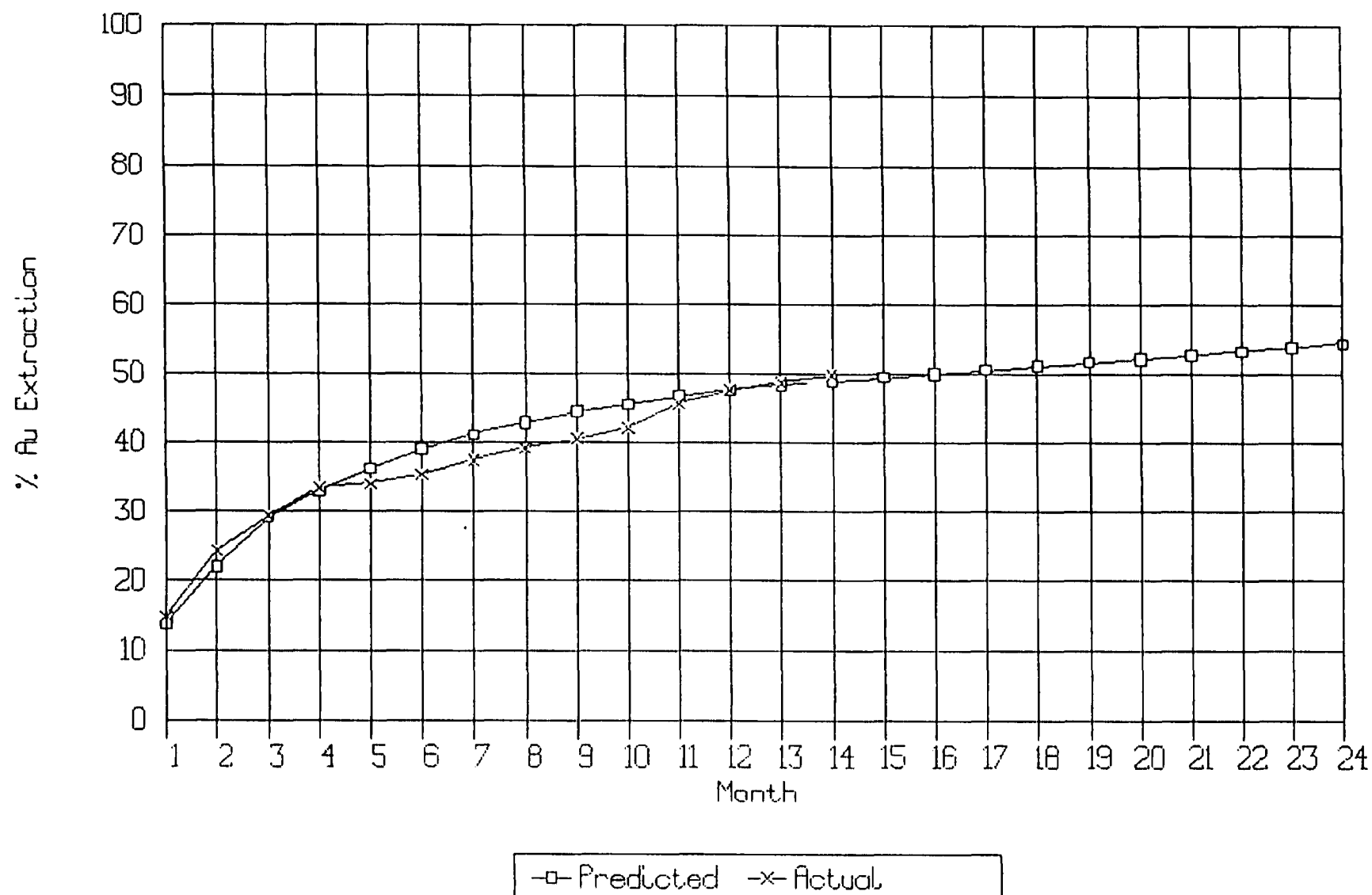
*PHYSICAL ASPECTS

Side slope failure indicates that a -1/4" crush size is not feasible for a larger heap. Larger crush size recoveries are being investigated in lab columns at present.

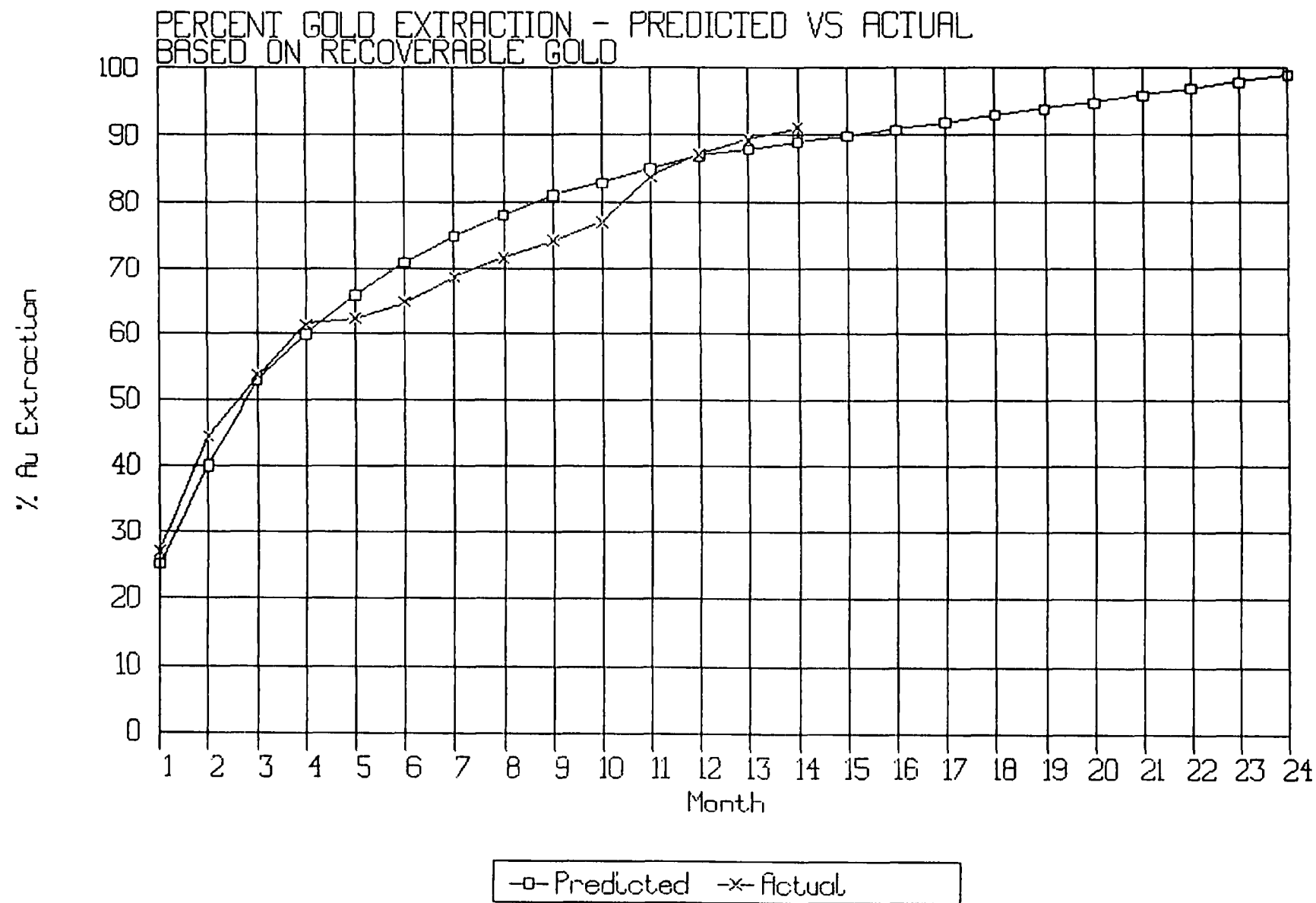
c: Rod MacLeod
Martin Quick

GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL



GILT EDGE SULFIDE HEAP LEACH TEST



DATE: NOVEMBER 10, 1993
 TO: JIM THOMPSON
 FROM: LAURA DAMON
 SUBJECT: SULFIDE TEST HEAP UPDATE - OCTOBER 1993

* RECOVERY

As of October 31, 1993, the Sulfide Test Heap (STH-5) has been on leach for 401 days. STH is showing a "Total Gold Basis" recovery of 49.1% and a "Recoverable Gold Basis" recovery of 89.9%.

Date	Leach Day	% Au Rec Total Basis		% Au Rec Recoverable Basis	
		Actual	Predicted	Actual	Predicted
10/26/92	31	15.2	14	27.8	25
11/26/92	62	24.5	22	44.8	40
12/26/92	92	29.5	29	54.0	53
01/26/93	123	33.6	33	61.4	60
02/26/93	154	34.1	36	62.3	66
03/26/93	182	35.4	39	64.8	71
04/26/93	213	37.6	41	68.7	75
05/26/93	243	39.2	43	71.7	78
06/26/93	274	40.6	45	74.3	81
07/26/93	304	42.1	46	77.0	83
08/26/93	335	45.8	47	83.8	85
09/26/93	366	47.7	48	87.3	87
10/26/93	396	48.9	49	89.5	89

After 13 months on leach the Sulfide Test Heap has attained 49% recovery on "Total Gold" basis and 87% recovery on "Recoverable Gold" basis. The heap continues to correspond to the predicted recovery percentages without taking into account the 'lost' recovery from February preg building.

* STH-5 EFFLUENT

Date	Leach Day	pH	NaCN Consumption	
			(lb/Ton Ore)	
09/30/92	5	7.4	.043	
10/31/92	36	8.0	.402	
11/30/92	66	7.9	.676	
12/31/92	97	8.2	.917	
01/31/93	128	8.7	1.127	
02/28/93	156	8.6	1.233	
03/31/93	187	8.8	1.341	
04/30/93	217	8.8	1.458	
05/31/93	248	8.9	1.559	
06/30/93	278	8.8	1.646	
07/31/93	309	8.2	1.751	
08/31/93	340	8.0	1.951	
09/30/93	370	8.4	2.118	
10/31/93	401	8.5	2.264	

*COST

To Date Expense: \$479787.92

\$/Ton Ore: \$12.09 (May be somewhat higher with
\$/Oz Prod: \$379.23 added processing costs)

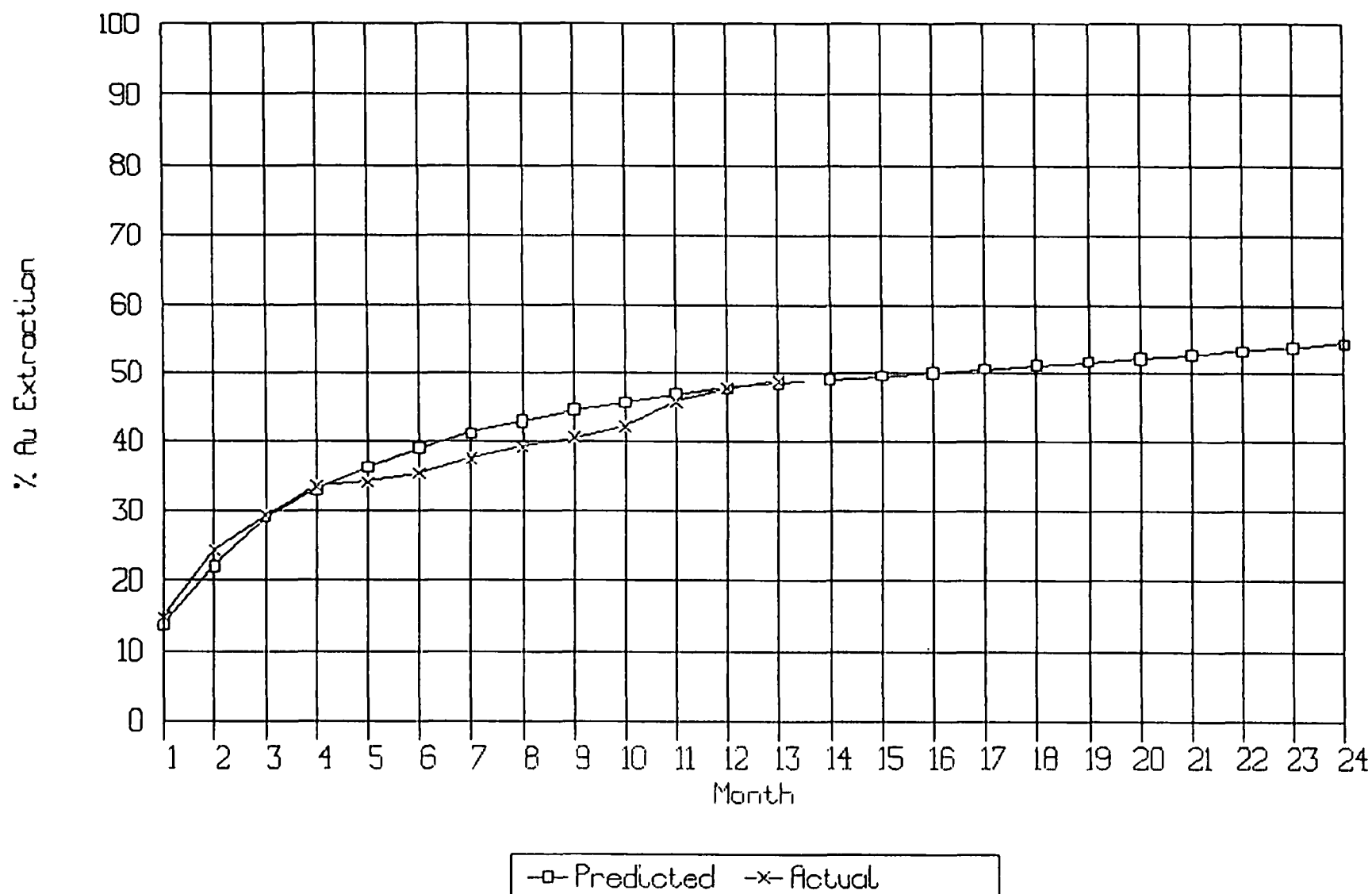
*PHYSICAL ASPECTS

Side slope failure indicates that a -1/4" crush size is not feasible for a larger heap. Larger crush size recoveries are being investigated in lab columns at present.

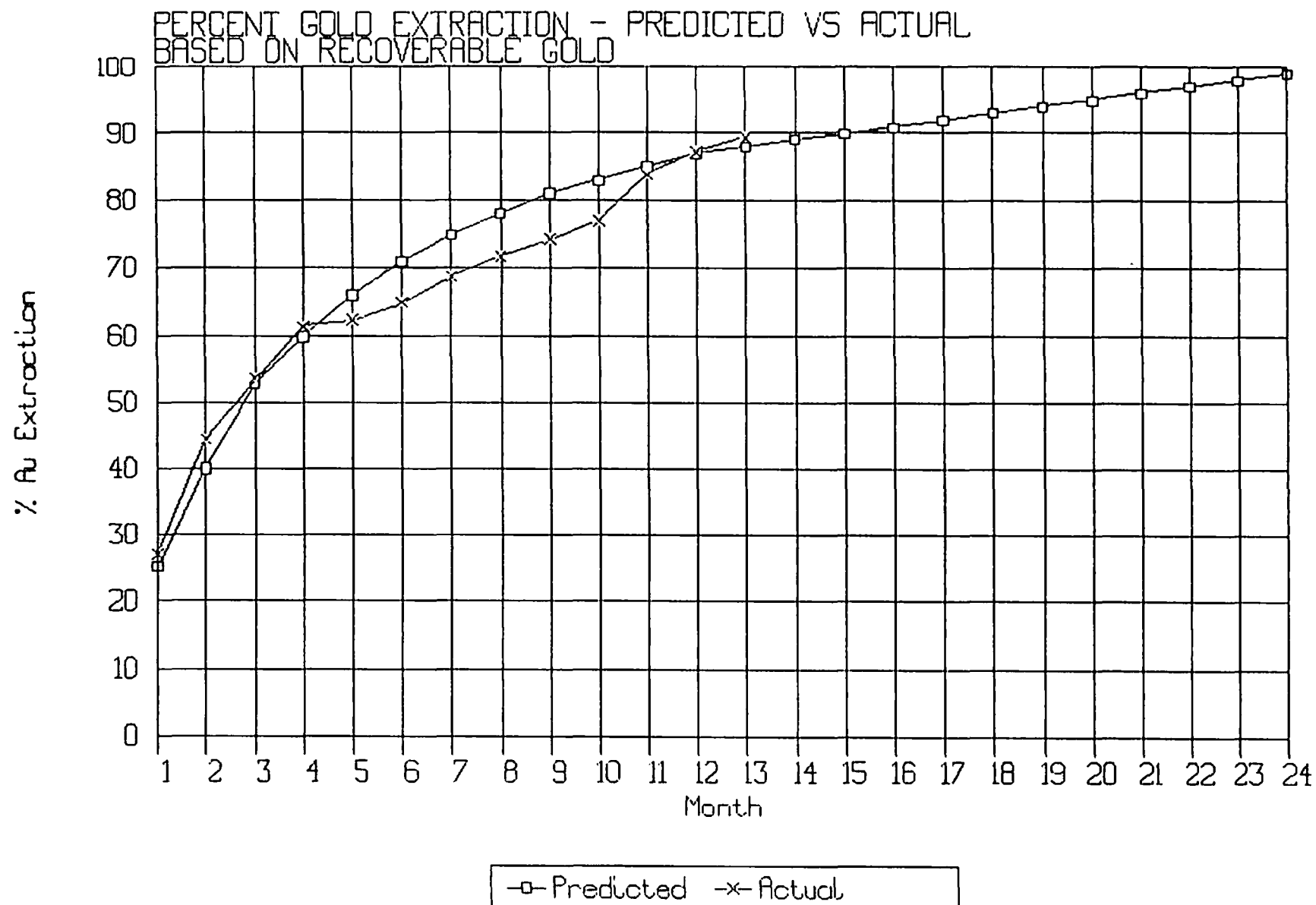
c: Rod MacLeod
Martin Quick

GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL



GILT EDGE SULFIDE HEAP LEACH TEST



DATE: OCTOBER 5, 1993
 TO: JIM THOMPSON
 FROM: LAURA DAMON *LD*
 SUBJECT: SULFIDE TEST HEAP UPDATE - SEPTEMBER 1993

* RECOVERY

As of September 30, 1993, the Sulfide Test Heap (STH-5) has been on leach for 370 days. STH is showing a "Total Gold Basis" recovery of 47.9% and a "Recoverable Gold Basis" recovery of 87.6%.

Date	Leach Day	% Au Rec Total Basis Actual	% Au Rec Total Basis Predicted	% Au Rec Recoverable Basis Actual	% Au Rec Recoverable Basis Predicted
10/26/92	31	15.2	14	27.8	25
11/26/92	62	24.5	22	44.8	40
12/26/92	92	29.5	29	54.0	53
01/26/93	123	33.6	33	61.4	60
02/26/93	154	34.1	36	62.3	66
03/26/93	182	35.4	39	64.8	71
04/26/93	213	37.6	41	68.7	75
05/26/93	243	39.2	43	71.7	78
06/26/93	274	40.6	45	74.3	81
07/26/93	304	42.1	46	77.0	83
08/26/93	335	45.8	47	83.8	85
09/26/93	366	47.7	48	87.3	87

At the end of one year the Sulfide Test Heap has attained 48% recovery on "Total Gold" basis and 87% recovery on "Recoverable Gold" basis. This corresponds exactly to the predicted recovery percentages without taking into account the 'lost' recovery from February preg building.

* STH-5 EFFLUENT

Date	Leach Day	pH	NaCN Consumption (lb/Ton Ore)
09/30/92	5	7.4	.043
10/31/92	36	8.0	.402
11/30/92	66	7.9	.676
12/31/92	97	8.2	.917
01/31/93	128	8.7	1.127
02/28/93	156	8.6	1.233
03/31/93	187	8.8	1.341
04/30/93	217	8.8	1.458
05/31/93	248	8.9	1.559
06/30/93	278	8.8	1.646
07/31/93	309	8.2	1.751
08/31/93	340	8.0	1.951
09/30/93	370	8.4	2.118

STH-5 pH is back up to 8.4 following the decrease from the side slopes being put under leach. The "ON" solution averaged 9.6 this month. NaCN consumption has again tapered off due to the increased pH.

*COST To Date Expense: \$479787.92
 \$/Ton Ore: \$12.09 (May be somewhat higher with
 \$/Oz Prod: \$388.96 added processing costs)

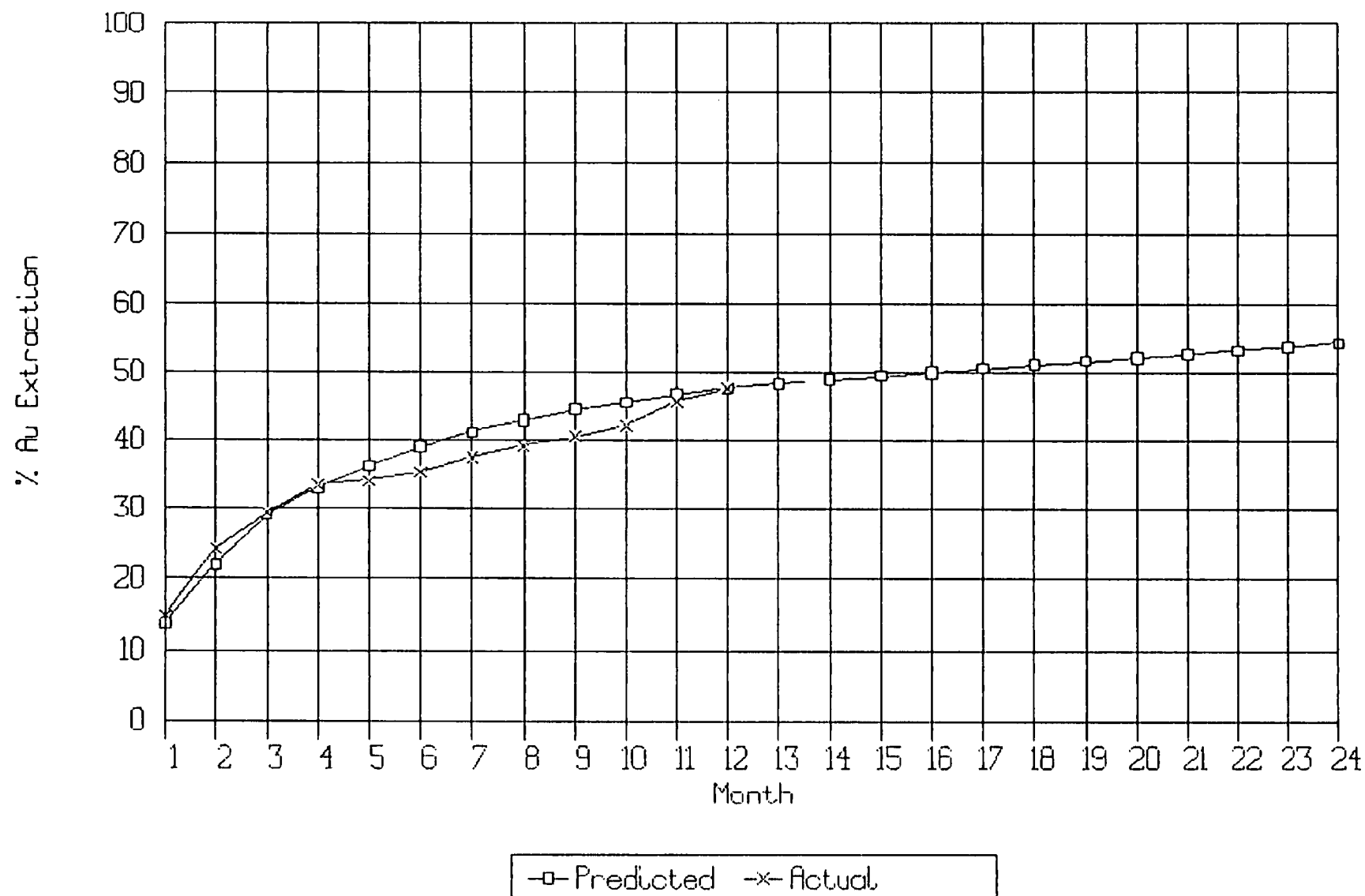
*PHYSICAL ASPECTS

Side slope failure indicates that a -1/4" crush size is not feasible for a larger heap.

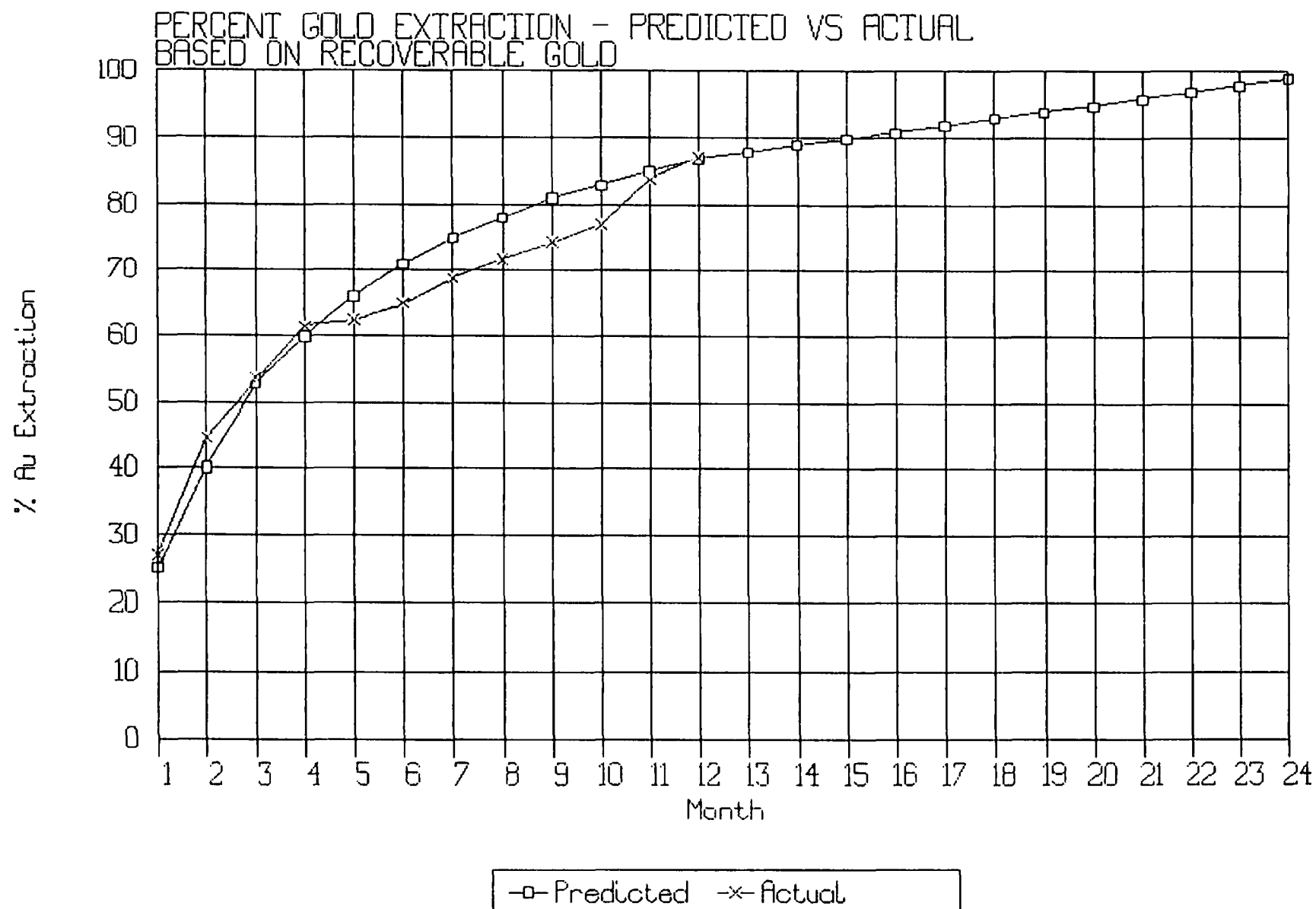
c: Rod MacLeod
 Martin Quick

GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL



GILT EDGE SULFIDE HEAP LEACH TEST



DATE: SEPTEMBER 1, 1993
 TO: JIM THOMPSON
 FROM: LAURA DAMON
 SUBJECT: SULFIDE TEST HEAP UPDATE - AUGUST 1993

* RECOVERY

As of August 31, 1993, the Sulfide Test Heap (STH-5) has been on leach for 340 days. STH is showing a "Total Gold Basis" recovery of 46.3% and a "Recoverable Gold Basis" recovery of 84.6%.

Date	Leach Day	% Au Rec Actual	% Au Rec Predicted	% Au Rec Actual	% Au Rec Predicted
		Total Basis		Recoverable Basis	
10/26/92	31	15.2	14	27.8	25
11/26/92	62	24.5	22	44.8	40
12/26/92	92	29.5	29	54.0	53
01/26/93	123	33.6	33	61.4	60
02/26/93	154	34.1	36	62.3	66
03/26/93	182	35.4	39	64.8	71
04/26/93	213	37.6	41	68.7	75
05/26/93	243	39.2	43	71.7	78
06/26/93	274	40.6	45	74.3	81
07/26/93	304	42.1	46	77.0	83
08/26/93	335	45.8	47	83.8	85

The rate of recovery continued to average 0.11% per day this month resulting in an additional 3.7% recovery over last month. This puts us just 1% below the predicted values on a "Total Gold Basis" recovery at the end of August. If the 1% recovery loss from "Preg Building" in February is taken into account, then a corrected recovery of 47% at the end of August is right on schedule. It is quite feasible that we will reach the predicted 48% recovery by our one year anniversary.

* STH-5 EFFLUENT

Date	Leach Day	pH	NaCN Consumption (lb/Ton Ore)
09/30/92	5	7.4	.043
10/31/92	36	8.0	.402
11/30/92	66	7.9	.676
12/31/92	97	8.2	.917
01/31/93	128	8.7	1.127
02/28/93	156	8.6	1.233
03/31/93	187	8.8	1.341
04/30/93	217	8.8	1.458
05/31/93	248	8.9	1.559
06/30/93	278	8.8	1.646
07/31/93	309	8.2	1.751
08/31/93	340	8.0	1.951

STH-5 pH decreased to 8.0 this month even though the "ON" solution pH rose to 9.5. The lower pH in the STH-5 effluent can account for the slight increase in NaCN consumption.

*COST

To Date Expense: \$479787.92

\$/Ton Ore: \$12.09 (May be somewhat higher with
\$/Oz Prod: \$402.81 added processing costs)

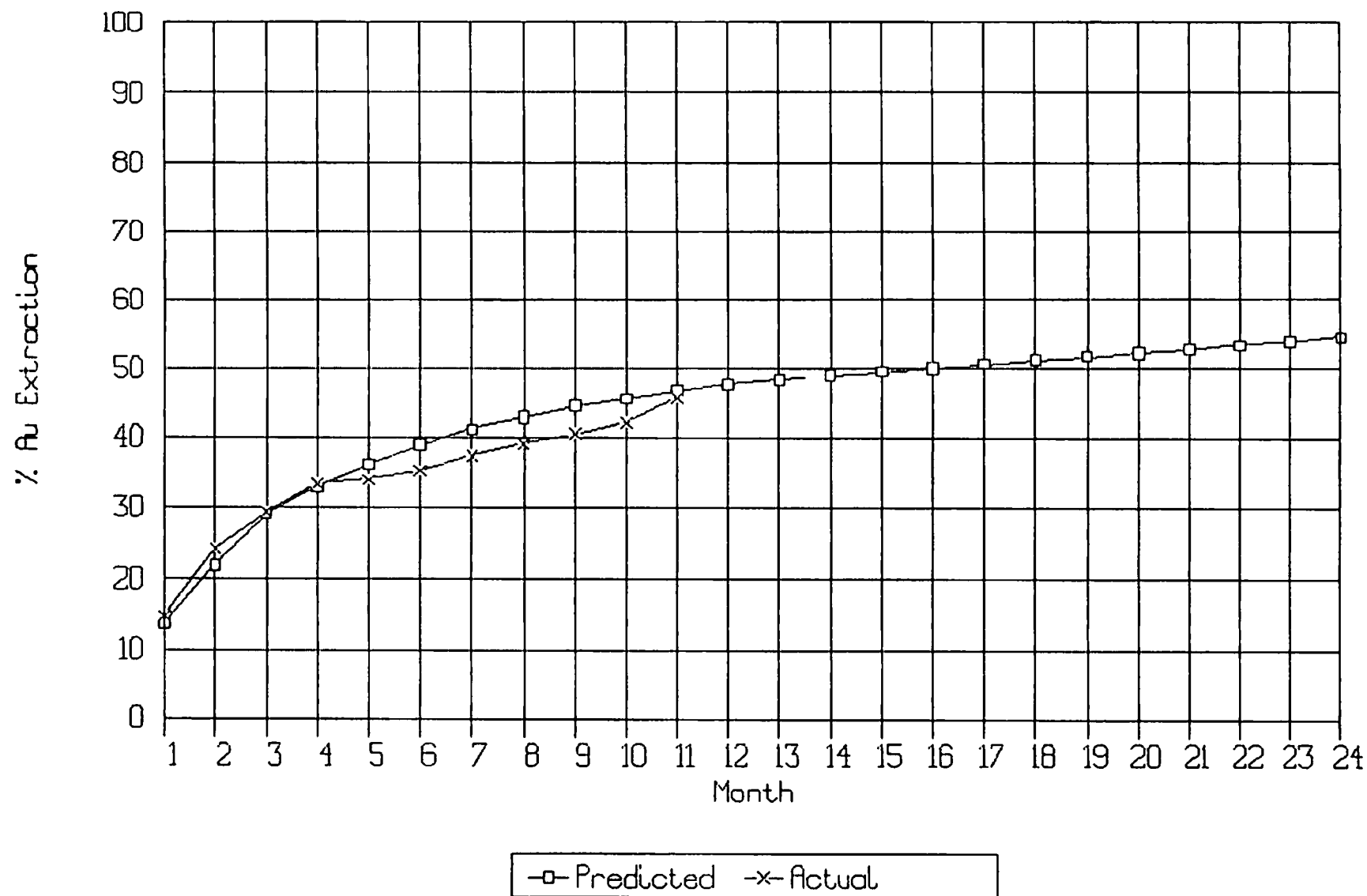
*PHYSICAL ASPECTS

The integrity of the heap has been questionable since its conception. Some failure has occurred evident by the caverns on the side slopes. The heap has held up better than expected, especially during the heavy rains this summer, although a -1/4" crush size is probably not feasible for a larger heap.

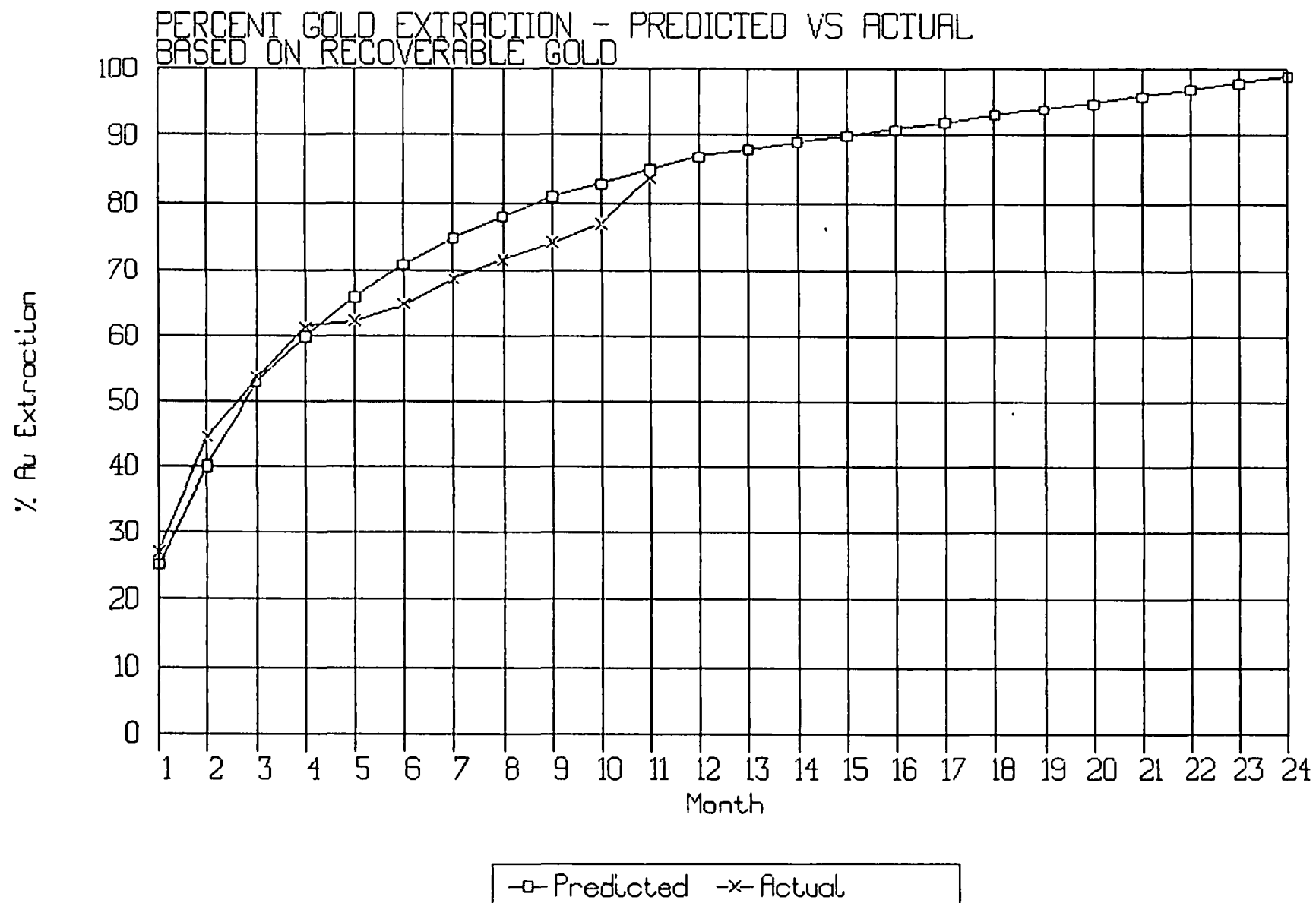
c: Rod MacLeod
Martin Quick

GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL



GILT EDGE SULFIDE HEAP LEACH TEST



DATE: AUGUST 2, 1993
 TO: JIM THOMPSON
 FROM: LAURA DAMON
 SUBJECT: SULFIDE TEST HEAP UPDATE - JULY 1993

* RECOVERY

As of July 31, 1993, the Sulfide Test Heap (STH-5) has been on leach for 309 days. STH is showing a "Total Gold Basis" recovery of 42.6% and a "Recoverable Gold Basis" recovery of 78.0%.

Date	Leach Day	% Au Rec Total Basis Actual	% Au Rec Total Basis Predicted	% Au Rec Recoverable Basis Actual	% Au Rec Recoverable Basis Predicted
10/26/92	31	15.2	14	27.8	25
11/26/92	62	24.5	22	44.8	40
12/26/92	92	29.5	29	54.0	53
01/26/93	123	33.6	33	61.4	60
02/26/93	154	34.1	36	62.3	66
03/26/93	182	35.4	39	64.8	71
04/26/93	213	37.6	41	68.7	75
05/26/93	243	39.2	43	71.7	78
06/26/93	274	40.6	45	74.3	81
07/26/93	304	42.1	46	77.0	83

The Sulfide Test Heap's side slopes were placed under leach starting on July 19th and finishing on July 27th. Increased gold values were obtained almost immediately. The rate of recovery before the side slopes were put under leach had diminished to 0.03% per day. After the side slopes were put under leach the rate of recovery rose to approximately 0.11% per day giving an additional 1% recovery by the end of the month. It was estimated that up to 2% additional recovery could be obtained from the side slope ore. At this point it appears that the additional 1% recovery is quite feasible. A 45% "Total Gold Basis" recovery may be reached by the end of August. If the 1% recovery loss from "Preg Building" in February is taken into account, then a corrected recovery of 46% at the end of August is only 1% shy of the predicted 47%.

* STH-5 EFFLUENT

Date	Leach Day	pH	NaCN Consumption (lb/Ton Ore)
09/30/92	5	7.4	.043
10/31/92	36	8.0	.402
11/30/92	66	7.9	.676
12/31/92	97	8.2	.917
01/31/93	128	8.7	1.127
02/28/93	156	8.6	1.233
03/31/93	187	8.8	1.341
04/30/93	217	8.8	1.458
05/31/93	248	8.9	1.559
06/30/93	278	8.8	1.646
07/31/93	309	8.2	1.751

STH-5 pH decreased to 8.2 after the side slopes were put under leach. This was presumably due to the lack of additional lime in the rain washed ore. The NaCN consumption rose slightly from .003 to .005 lb/ton ore/day from the lower pH and additional metal loading.

*COST

To Date Expense: \$479787.92

\$/Ton Ore: \$12.09 (May be somewhat higher with

\$/Oz Prod: \$437.14 added processing costs)

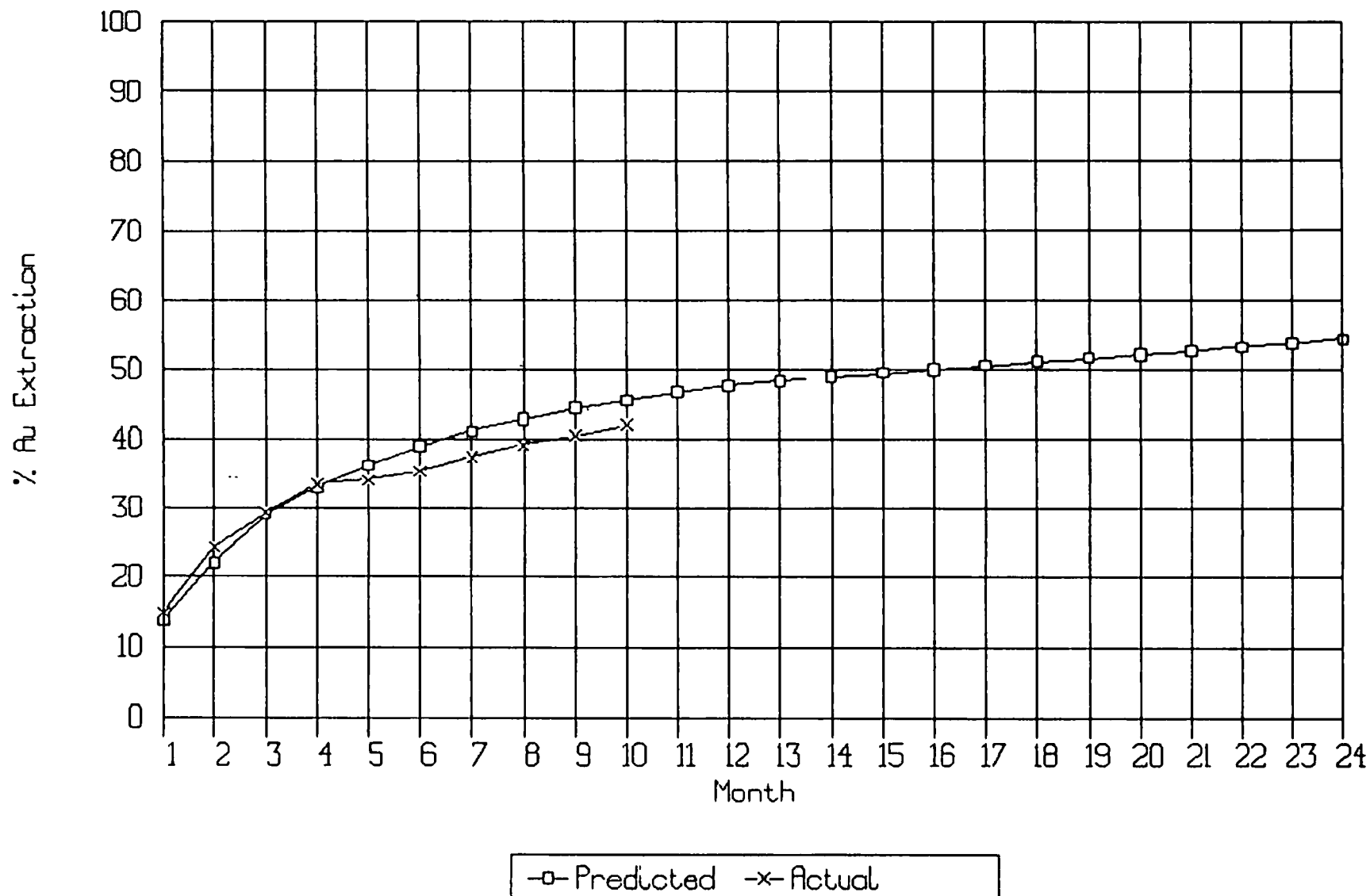
*PHYSICAL ASPECTS

The integrity of the heap has been questionable since its conception. Some failure has occurred evident by the caverns on the side slopes. The heap has held up better than expected, especially during the heavy rains this summer, although a -1/4" crush size is probably not feasible for a larger heap.

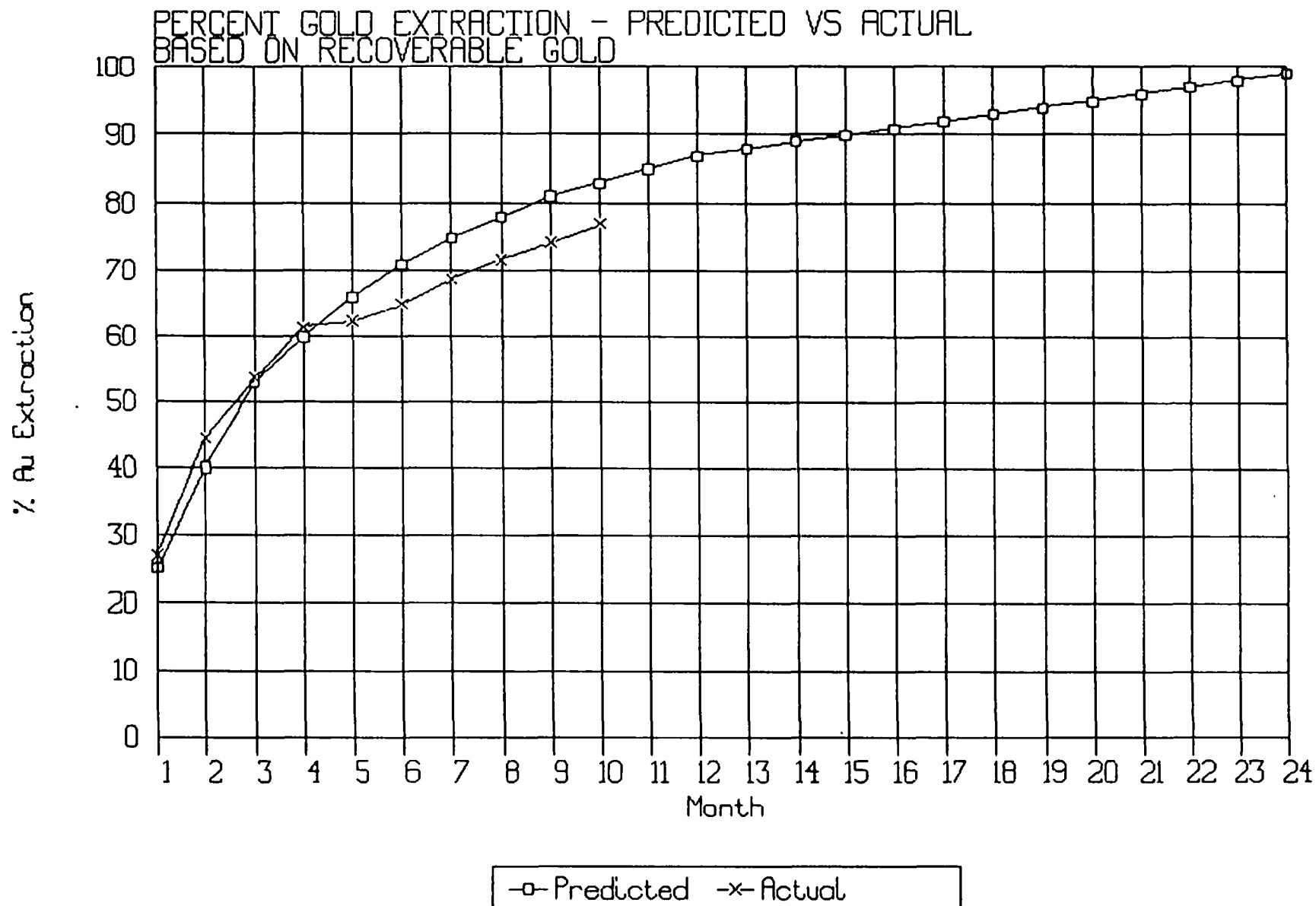
c: Rod MacLeod
Martin Quick

GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL



GILT EDGE SULFIDE HEAP LEACH TEST



DATE: JULY 2, 1993
 TO: JIM THOMPSON
 FROM: LAURA DAMON *LAD*
 SUBJECT: SULFIDE TEST HEAP UPDATE - JUNE 1993

* RECOVERY

As of June 30, 1993, the Sulfide Test Heap (STH-5) has been on leach for 278 days. STH is showing a "Total Gold Basis" recovery of 40.8% and a "Recoverable Gold Basis" recovery of 74.7%.

Date	Leach Day	% Au Rec Total Basis Actual	% Au Rec Total Basis Predicted	% Au Rec Recoverable Basis Actual	% Au Rec Recoverable Basis Predicted
10/26/92	31	15.2	14	27.8	25
11/26/92	62	24.5	22	44.8	40
12/26/92	92	29.5	29	54.0	53
01/26/93	123	33.6	33	61.4	60
02/26/93	154	34.1	36	62.3	66
03/26/93	182	35.4	39	64.8	71
04/26/93	213	37.6	41	68.7	75
05/26/93	243	39.2	43	71.7	78
06/26/93	274	40.6	45	74.3	81

The test heap's recovery is still rising at a rate of about 0.5% every 10 days. The side slopes should be able to be put under leach sometime in July.

* STH-5 EFFLUENT

Date	Leach Day	pH	NaCN Consumption (lb/Ton Ore)
09/30/92	5	7.4	.043
10/31/92	36	8.0	.402
11/30/92	66	7.9	.676
12/31/92	97	8.2	.917
01/31/93	128	8.7	1.127
02/28/93	156	8.6	1.233
03/31/93	187	8.8	1.341
04/30/93	217	8.8	1.458
05/31/93	248	8.9	1.559
06/30/93	278	8.8	1.646

The STH effluent pH has leveled off at 8.8 - 8.9. NaCN consumption has tapered off to .003 lb/ton/day and held steady for the past two months.

*COST To Date Expense: \$479787.92
 \$/Ton Ore: \$12.09 (May be somewhat higher with
 \$/Oz Prod: \$456.53 added processing costs)

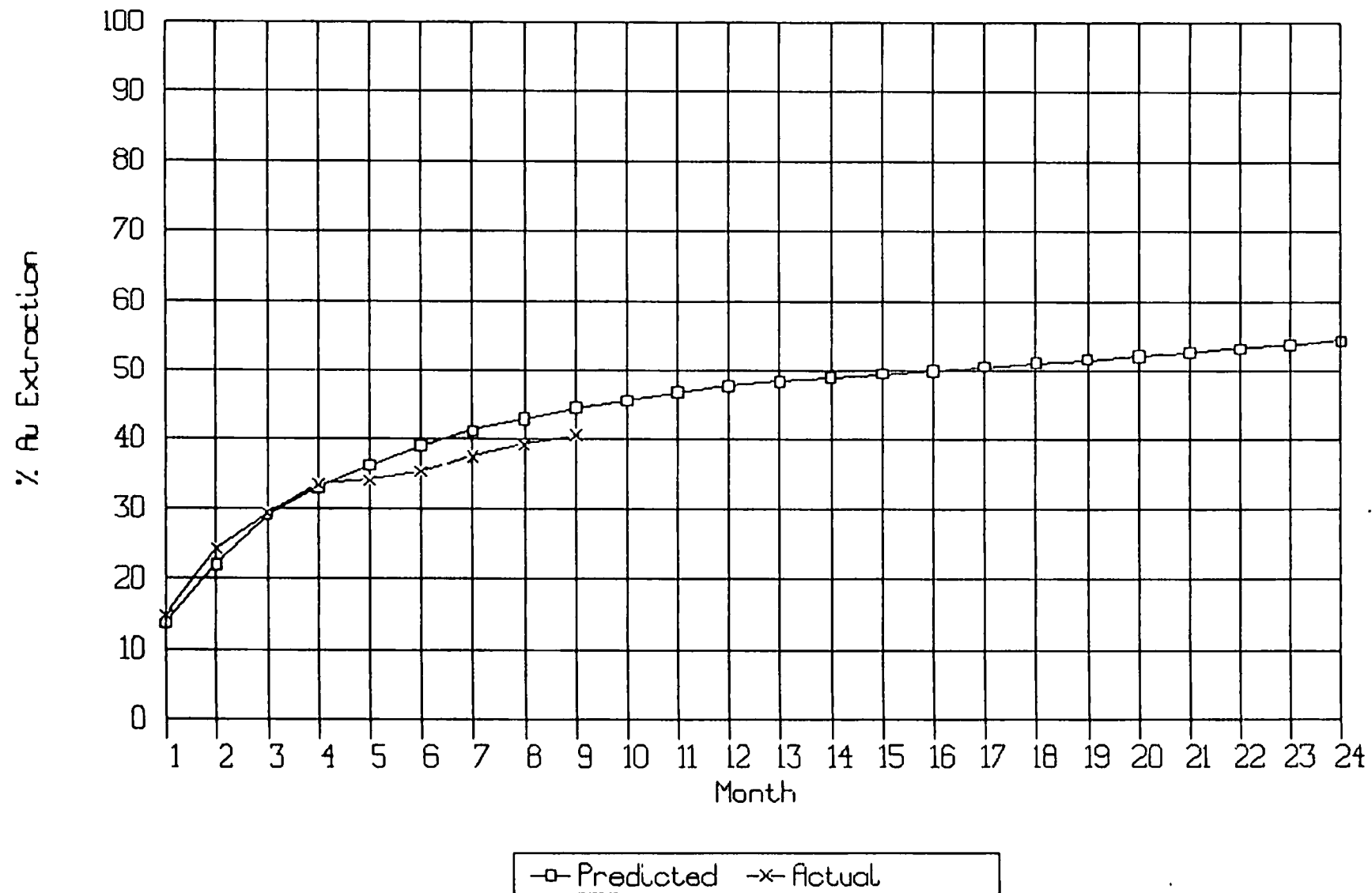
*PHYSICAL ASPECTS

The integrity of the heap failed to some extent when heavy precipitation fell on it in a short period of time. The heap was completely shut off for 2 days to avoid side slope failure.

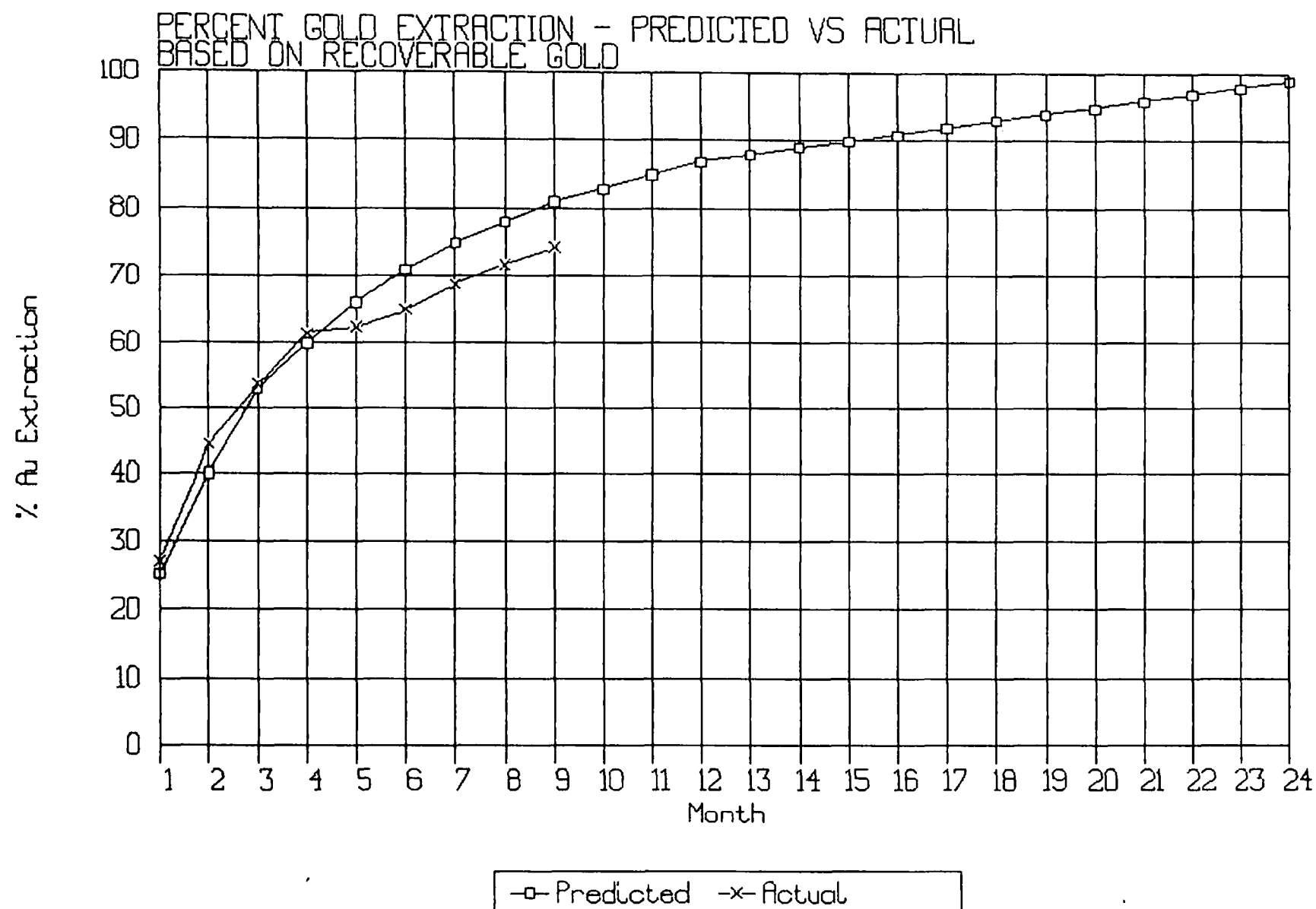
c: Rod MacLeod
 Martin Quick

GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL



GILT EDGE SULFIDE HEAP LEACH TEST



DATE: JUNE 3, 1993
 TO: JIM THOMPSON
 FROM: LAURA DAMON
 SUBJECT: SULFIDE TEST HEAP UPDATE - MAY 1993

* RECOVERY

As of May 31, 1993, the Sulfide Test Heap (STH-5) has been on leach for 248 days. STH is showing a "Total Gold Basis" recovery of 39.5% and a "Recoverable Gold Basis" recovery of 72.3%.

Date	Leach Day	% Au Rec Total Basis Actual	% Au Rec Total Basis Predicted	% Au Rec Recoverable Basis Actual	% Au Rec Recoverable Basis Predicted
10/26/92	31	15.2	14	27.8	25
11/26/92	62	24.5	22	44.8	40
12/26/92	92	29.5	29	54.0	53
01/26/93	123	33.6	33	61.4	60
02/26/93	154	34.1	36	62.3	66
03/26/93	182	35.4	39	64.8	71
04/26/93	213	37.6	41	68.7	75
05/26/93	243	39.2	43	71.7	78

The actual recoveries continue to lag behind the predicted values although, the recovery curve has remained at the steepened slope this month. The test heap's recovery is rising at a rate of about 0.5% every 10 days. At this rate the "total gold basis" recovery should be about 45% at one year as opposed to the predicted value of 48%. Since up to 5% of the side slopes are still not under leach due to the instability of the heap, the actual recoveries could be retarded by up to 2%. I think it is important to leach the test heap for as long as possible through the summer months to get the aided benefit of warm weather leaching. This will give us a more accurate picture of the leaching curve and minimize the "preg building" effects from February.

* STH-5 EFFLUENT

Date	Leach Day	pH	NaCN Consumption (lb/Ton Ore)
09/30/92	5	7.4	.043
10/31/92	36	8.0	.402
11/30/92	66	7.9	.676
12/31/92	97	8.2	.917
01/31/93	128	8.7	1.127
02/28/93	156	8.6	1.233
03/31/93	187	8.8	1.341
04/30/93	217	8.8	1.458
05/31/93	248	8.9	1.559

The STH effluent pH is still gradually rising although the "ON" solution pH is gradually falling. It appears they are coming to equilibrium.

*COST

To Date Expense: \$479787.92
 \$/Ton Ore: \$12.09 (May be somewhat higher with
 \$/Oz Prod: \$471.65 added processing costs)

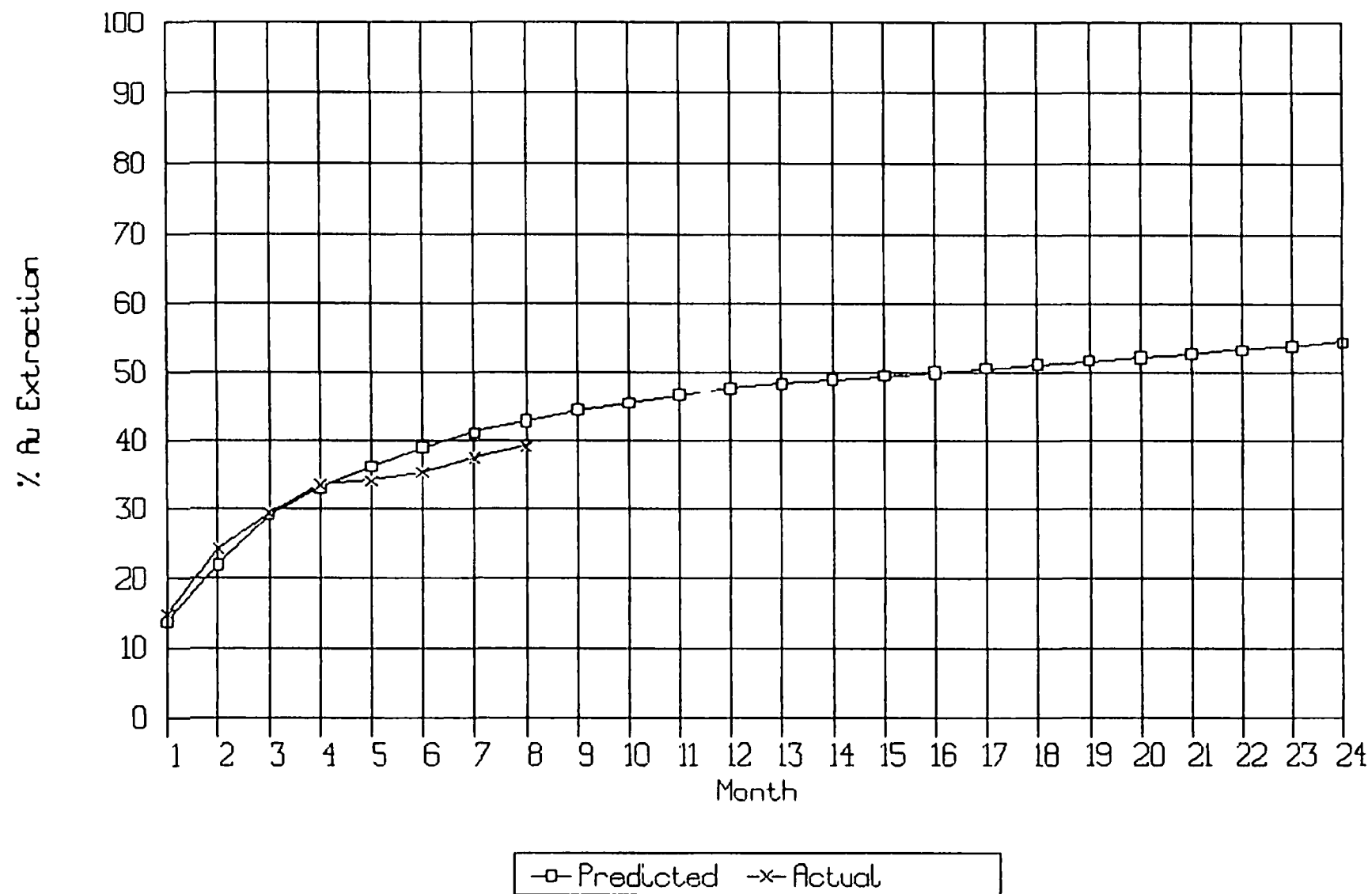
*PHYSICAL ASPECTS

The integrity of the heap is failing with the very heavy precipitation that has fallen in the last few days. The heap was completely shut off to avoid side slope failure. Leaching will resume when the threat of losing the sides of the heap is over.

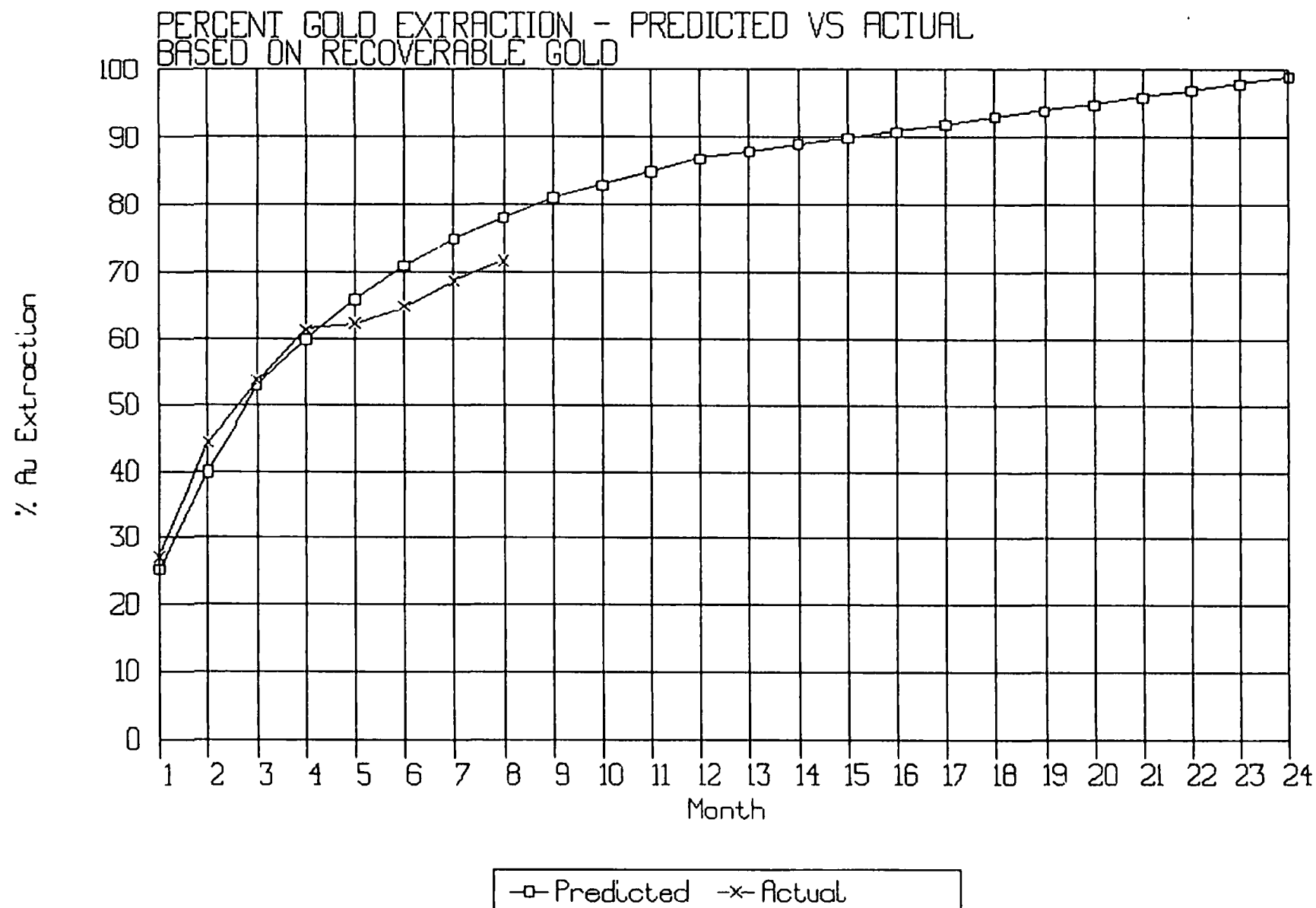
c: Rod MacLeod
 Martin Quick

GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL



GILT EDGE SULFIDE HEAP LEACH TEST



DATE: MAY 17, 1993
 TO: JIM THOMPSON
 FROM: LAURA DAMON
 SUBJECT: SULFIDE TEST HEAP UPDATE - APRIL 1993

* RECOVERY

As of April 30, 1993, the Sulfide Test Heap (STH-5) has been on leach for 217 days. STH is showing a "Total Gold Basis" recovery of 37.8% and a "Recoverable Gold Basis" recovery of 69.1%.

Date	Leach Day	% Au Rec Total Basis Actual	% Au Rec Total Basis Predicted	% Au Rec Recoverable Basis Actual	% Au Rec Recoverable Basis Predicted
10/26/92	31	15.2	14	27.8	25
11/26/92	62	24.5	22	44.8	40
12/26/92	92	29.5	29	54.0	53
01/26/93	123	33.6	33	61.4	60
02/26/93	154	34.1	36	62.3	66
03/26/93	182	35.4	39	64.8	71
04/26/93	213	37.6	41	68.7	75

The actual recoveries still remain below the predicted values although, as seen in the graph, the recovery slope steepened this month. This may be attributed to holding the gold values steady in the "ON" solution and/or to added recovery from the warmer weather. If the time from preg building is discounted, when we actually lost recovery, then we are only about 1% below what was predicted. Up to 5% of the side slopes are still not under leach due to the instability of the heap. This could retard recoveries by about 2%.

* STH-5 EFFLUENT

Date	Leach Day	pH	Cumulative NaCN Consumption (lb/Ton Ore)
09/30/92	5	7.4	.043
10/31/92	36	8.0	.402
11/30/92	66	7.9	.676
12/31/92	97	8.2	.917
01/31/93	128	8.7	1.127
02/28/93	156	8.6	1.233
03/31/93	187	8.8	1.341
04/30/93	217	8.8	1.458

The STH effluent pH seems to have leveled out at a pH of about 8.8 although the "ON" solution has fallen to a pH range of about 9.4. The NaCN consumption appears to be holding at a steady state of about .004 lb/ton ore/day.

*COST

To Date Expense: \$479787.92
 \$/Ton Ore: \$12.09
 \$/Oz Prod: \$493.45

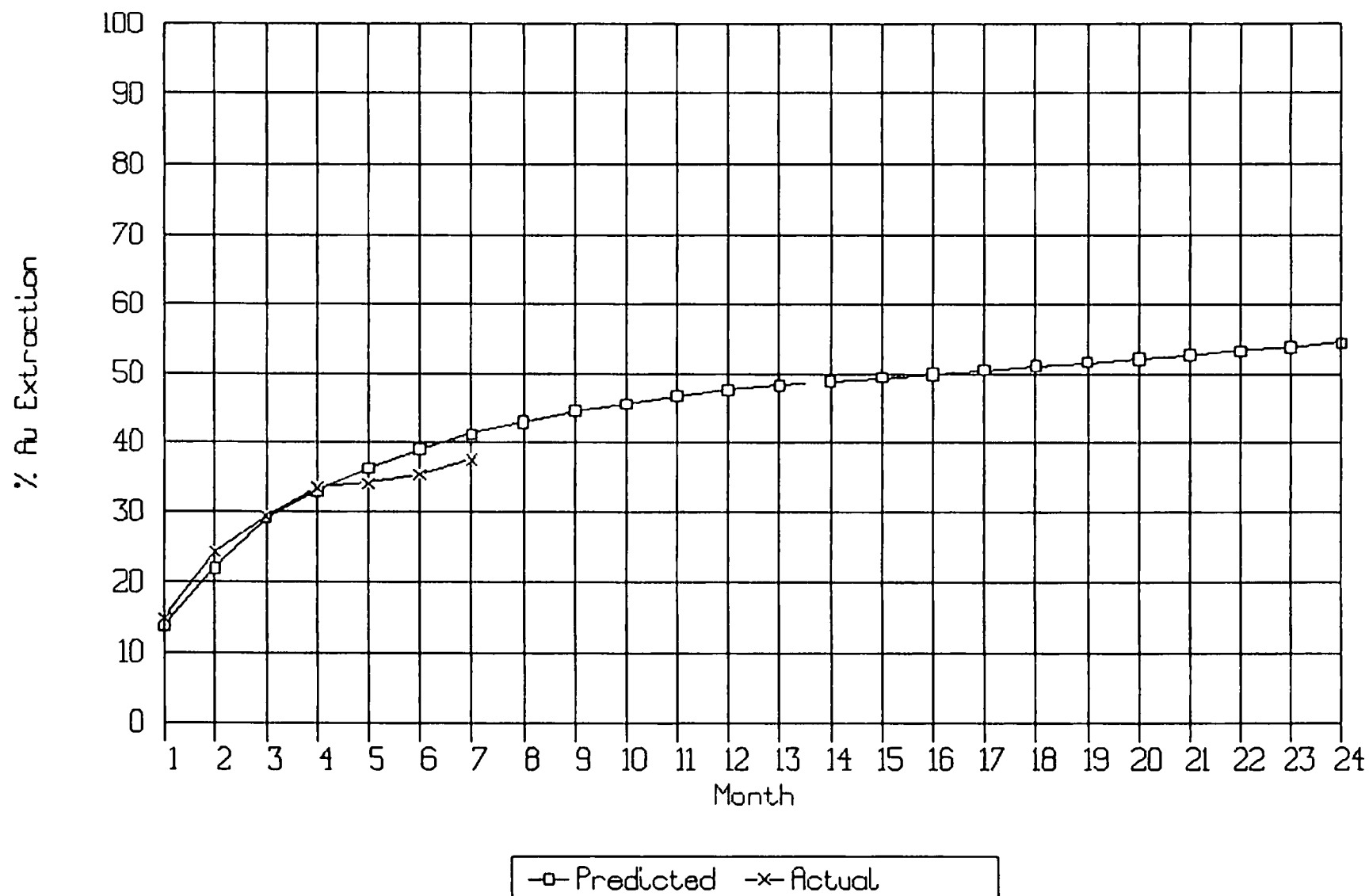
*PHYSICAL ASPECTS

The integrity of the heap appears to be holding well even during heavy rain. We will continue to monitor it closely. The side slopes will be put under leach when the threat of heavy rains is over in hopes of avoiding slope failure.

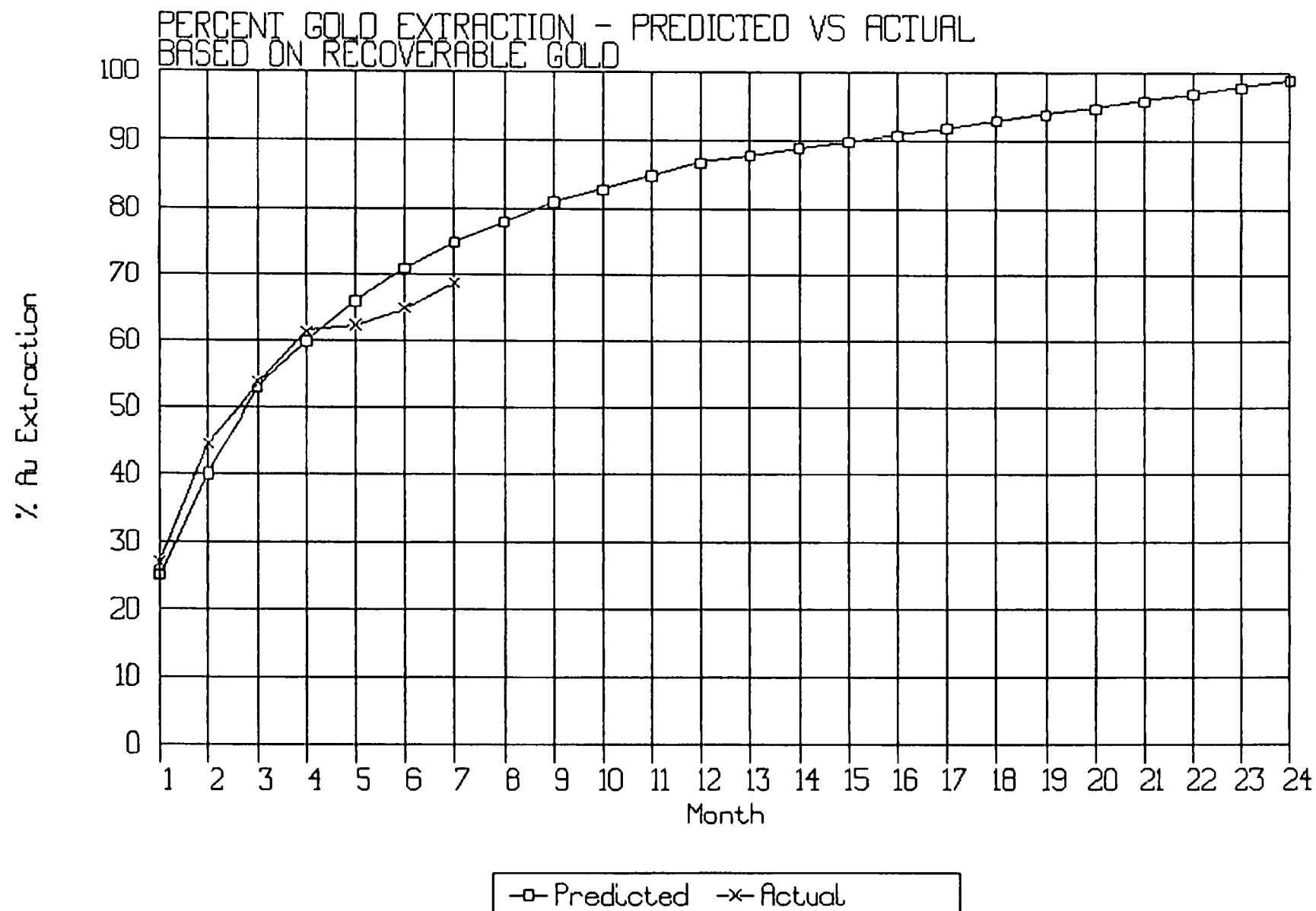
c: Rod MacLeod
 Martin Quick

GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL



GILT EDGE SULFIDE HEAP LEACH TEST



DATE: APRIL 5, 1993
 TO: JIM THOMPSON
 FROM: LAURA DAMON LLD
 SUBJECT: SULFIDE TEST HEAP UPDATE - MARCH 1993

* RECOVERY

As of March 31, 1993, the Sulfide Test Heap (STH-5) has been on leach for 187 days. STH is showing a "Total Gold Basis" recovery of 35.6% and a "Recoverable Gold Basis" recovery of 65.2%.

Date	Leach Day	% Au Rec Total Basis Actual	% Au Rec Total Basis Predicted	% Au Rec Recoverable Basis Actual	% Au Rec Recoverable Basis Predicted
10/26/92	31	15.2	14	27.8	25
11/26/92	62	24.5	22	44.8	40
12/26/92	92	29.5	29	54.0	53
01/26/93	123	33.6	33	61.4	60
02/26/93	154	34.1	36	62.3	66
03/26/93	187	35.4	39	64.8	71

The actual recoveries remain below the predicted values this month. This can be attributed to "Preg Building" last month. Apparently due to some sort of dilution in the heap, we actually lost recovery. Although we have regained some gold ounces, the system did not recover as quickly as I had hoped. Since the return of the RO Unit, the "ON" solution gold values will be kept low. I hope that with the system in balance the "lost" gold ounces will be "found". Up to 5% of the side slope ore is still not under leach due to the instability of the heap. This could retard recoveries by about 2%.

* STH-5 EFFLUENT

Date	Leach Day	pH	Cumulative NaCN Consumption (lb/Ton Ore)
09/30/92	5	7.4	.043
10/31/92	36	8.0	.402
11/30/92	66	7.9	.676
12/31/92	97	8.2	.917
01/31/93	128	8.7	1.127
02/28/93	156	8.6	1.233
03/31/93	187	8.8	1.341

The STH effluent pH has been maintaining a pH of 8.7 - 8.8. The "ON" solution is averaging a pH of about 9.5. The NaCN consumption continues to taper off with the elevated pH in the heap effluent.

*COST

To Date Expense: \$479787.92
 \$/Ton Ore: \$12.09
 \$/Oz Prod: \$522.72

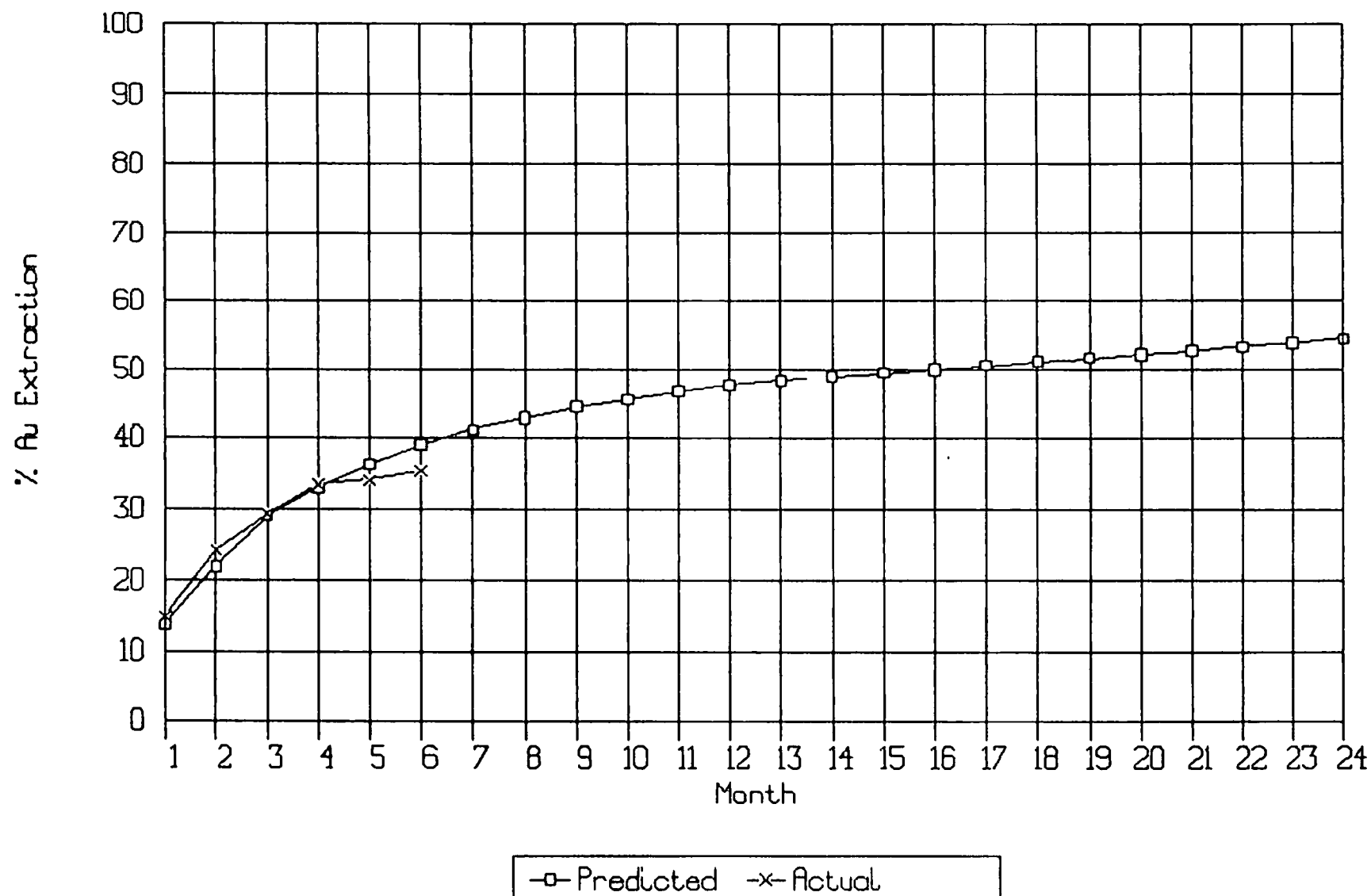
*PHYSICAL ASPECTS

The stability of the heap continues to be questionable. There is apprehension that when the spring rains start the heap may experience complete failure. It will be monitored closely as that time nears. The south side of the heap is still not under leach at present.

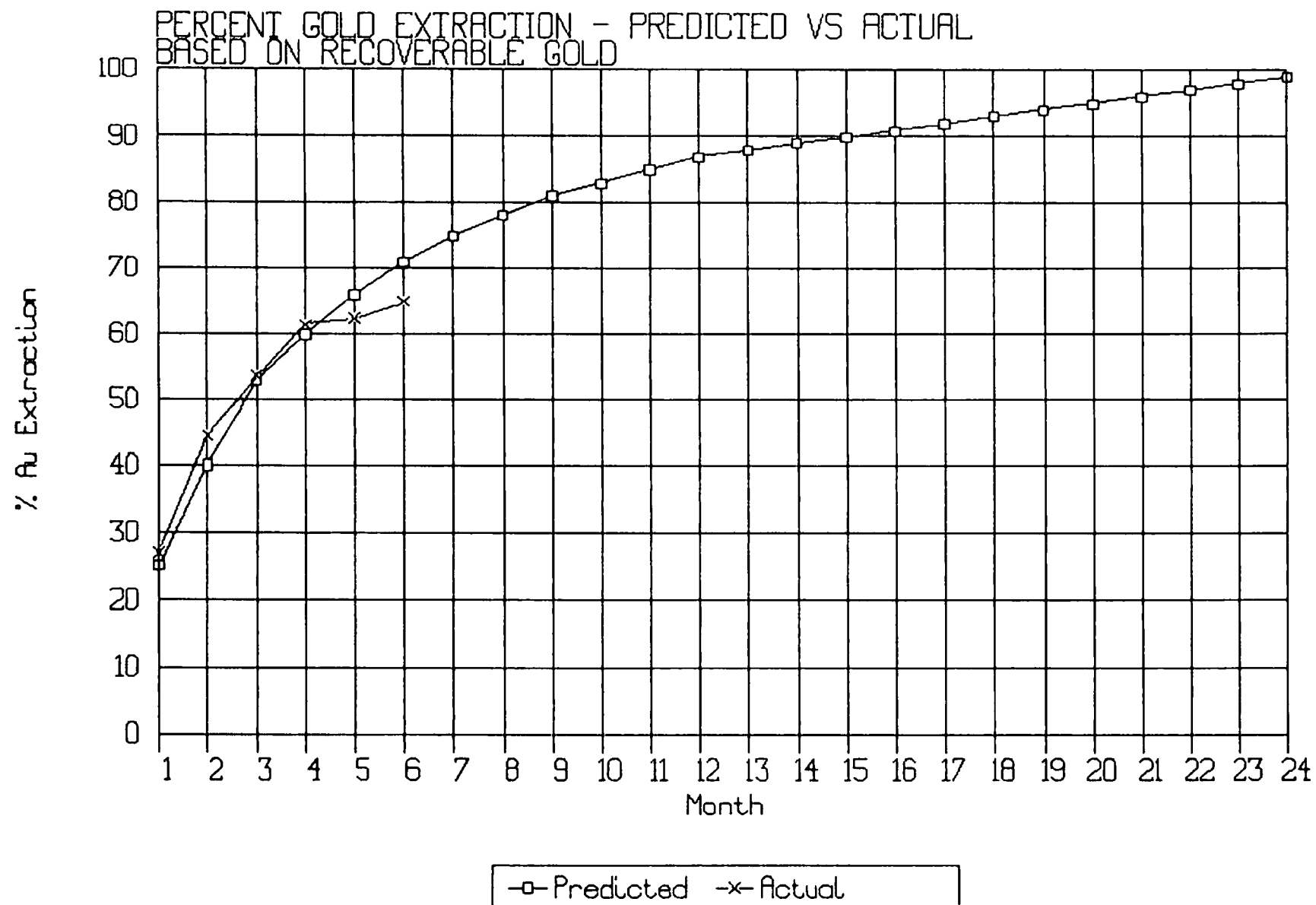
c: Rod MacLeod
 Martin Quick

GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL



GILT EDGE SULFIDE HEAP LEACH TEST



DATE: MARCH 17, 1993
 TO: JIM THOMPSON
 FROM: LAURA DAMON
 SUBJECT: SULFIDE TEST HEAP UPDATE - FEBRUARY 1993

* RECOVERY

As of February 28, 1993, the Sulfide Test Heap (STH-5) has been on leach for 156 days. STH is showing a "Total Gold Basis" recovery of 34.3% and a "Recoverable Gold Basis" recovery of 62.7%.

Date	Leach Day	% Au Rec Total Basis Actual	% Au Rec Total Basis Predicted	% Au Rec Recoverable Basis Actual	% Au Rec Recoverable Basis Predicted
10/26/92	31	15.2	14	27.8	25
11/26/92	62	24.5	22	44.8	40
12/26/92	92	29.5	29	54.0	53
01/26/93	123	33.6	33	61.4	60
02/26/93	154	34.1	36	62.3	66

The actual recoveries have fallen short of the predicted values this month presumably due to "Preg Building" in the plant. The gold values of the "ON" solution were greater than the effluent gold values resulting in a decrease in total recovery from 34.7% to 33.8%. The "ON" solution has been held at a fairly steady state since February 24, and the recovery is again increasing at a rate of about 0.5% per 10 days. Up to 5% of the side slope ore is still not under leach due to the instability of the heap. This could retard the recoveries by about 2%.

* STH-5 EFFLUENT

Date	Leach Day	pH	Cumulative NaCN Consumption (lb/Ton Ore)
09/30/92	5	7.4	.043
10/31/92	36	8.0	.402
11/30/92	66	7.9	.676
12/31/92	97	8.2	.917
01/31/93	128	8.7	1.127
02/28/93	156	8.6	1.233

The STH effluent pH has been maintaining a pH of 8.6 - 8.7. The "ON" solution is averaging a pH of about 9.5. The NaCN consumption continues to taper off with the elevated pH in the heap effluent.

*COST

To Date Expense: \$479787.92
 \$/Ton Ore: \$12.09
 \$/Oz Prod: \$543.38

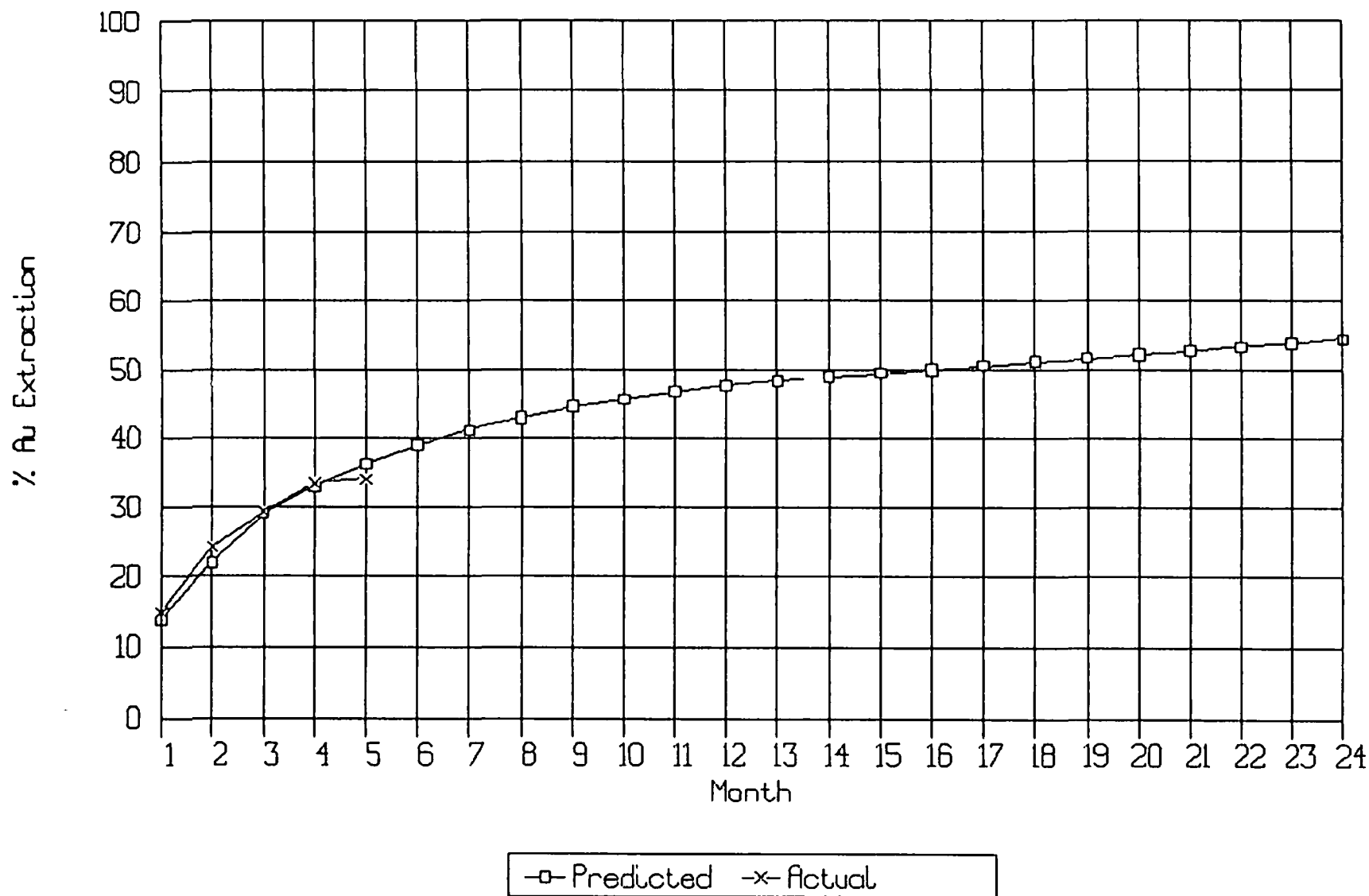
*PHYSICAL ASPECTS

The stability of the heap continues to be questionable. The south side of the heap is still not under leach at present.

c: Rod MacLeod
 Martin Quick

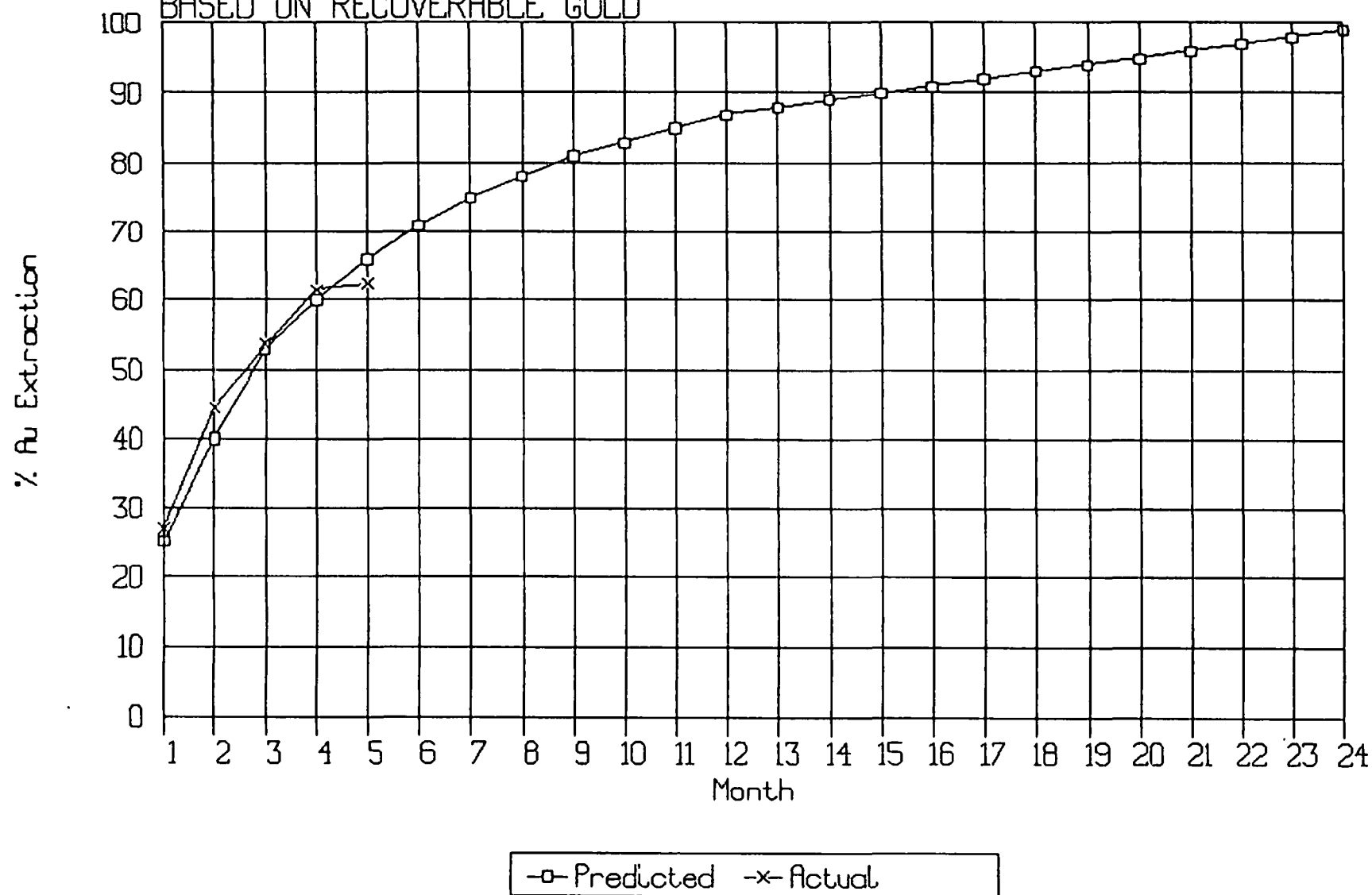
GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL



GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL
BASED ON RECOVERABLE GOLD



DATE: FEBRUARY 2, 1993
TO: JIM THOMPSON
FROM: LAURA DAMON
SUBJECT: SULFIDE TEST HEAP UPDATE - JANUARY 1993

* RECOVERY

As of January 31, 1993, the Sulfide Test Heap (STH-5) has been on leach for 128 days. STH is showing a "Total Gold Basis" recovery of 34.0% and a "Recoverable Gold Basis" recovery of 62.4%.

Date	Leach Day	% Au Rec		% Au Rec	
		Total Basis		Recoverable Basis	
		Actual	Predicted	Actual	Predicted
10/26/92	31	15.2	14	27.8	25
11/26/92	62	24.5	22	44.8	40
12/26/92	92	29.5	29	54.0	53
01/26/93	123	33.6	33	61.4	60

The actual recoveries continue to run slightly higher than what was predicted. Up to 5% of the side slope ore is still not under leach due to the instability of the heap. This could retard the recoveries by about 2%.

* STH-5 EFFLUENT

Date	Leach Day	pH	Cumulative NaCN Consumption (lb/Ton Ore)
09/30/92	5	7.4	.043
10/31/92	36	8.0	.402
11/30/92	66	7.9	.676
12/31/92	97	8.2	.917
01/31/93	128	8.7	1.108 1.123

The STH effluent pH has continued to increase and is now maintaining a pH above 8.5. The "ON" solution is averaging a pH of about 9.7. The NaCN consumption has tapered off somewhat presumably due to the elevated pH in the heap.

***COST**

*COST	Dec. change	Oxide Allocation
Year to Date Expense: \$479787.92	\$492,242.54 +	
\$/Ton Ore: \$12.09		
\$/Dz Prod: \$545.93		

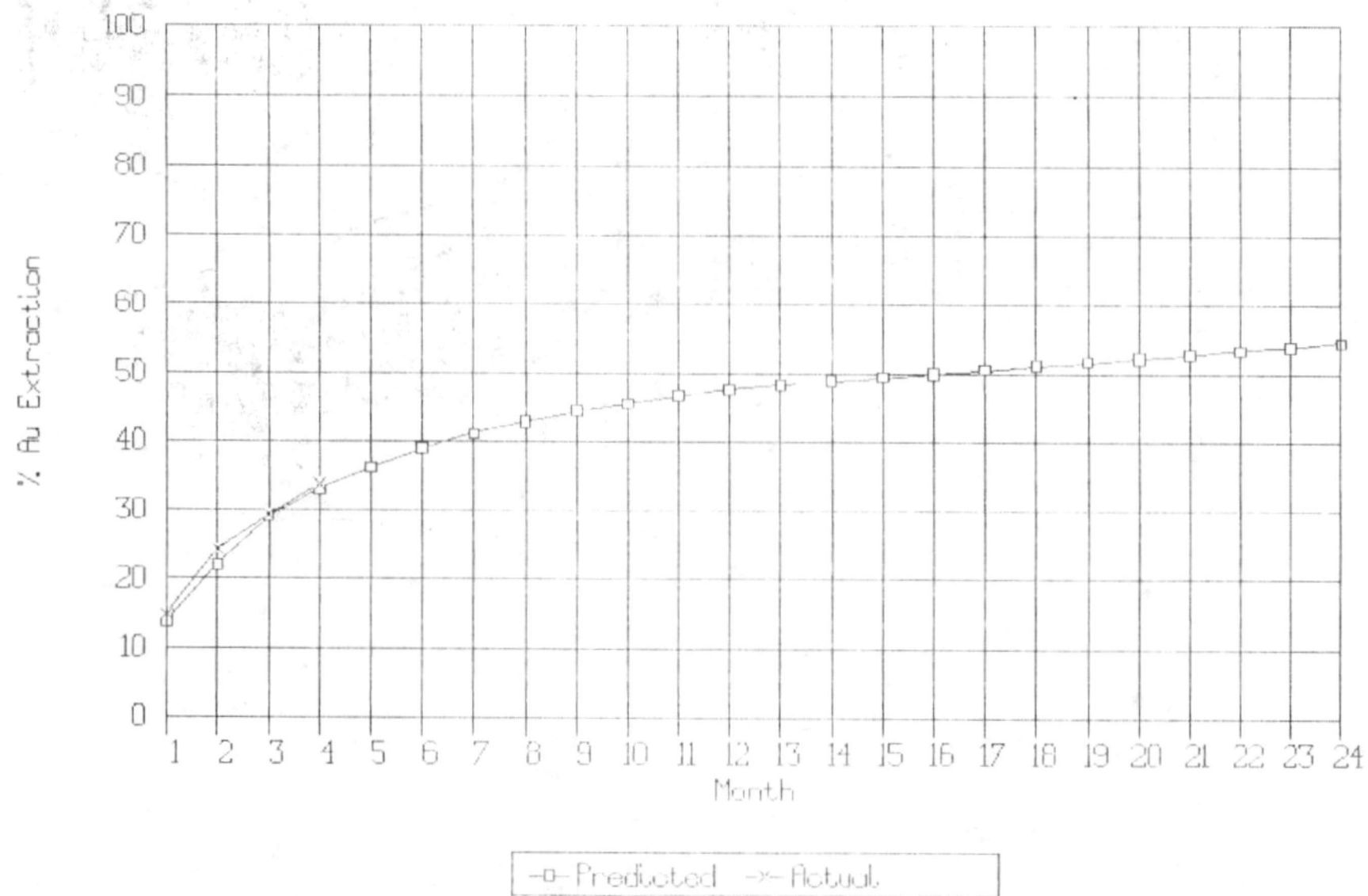
*PHYSICAL ASPECTS

The stability of the heap continues to be questionable. The south side of the heap is still not under leach at present. On January 15, a half inch line disconnected causing a washout of approximately 500 tons.

c: Rod MacLeod
Martin Quick

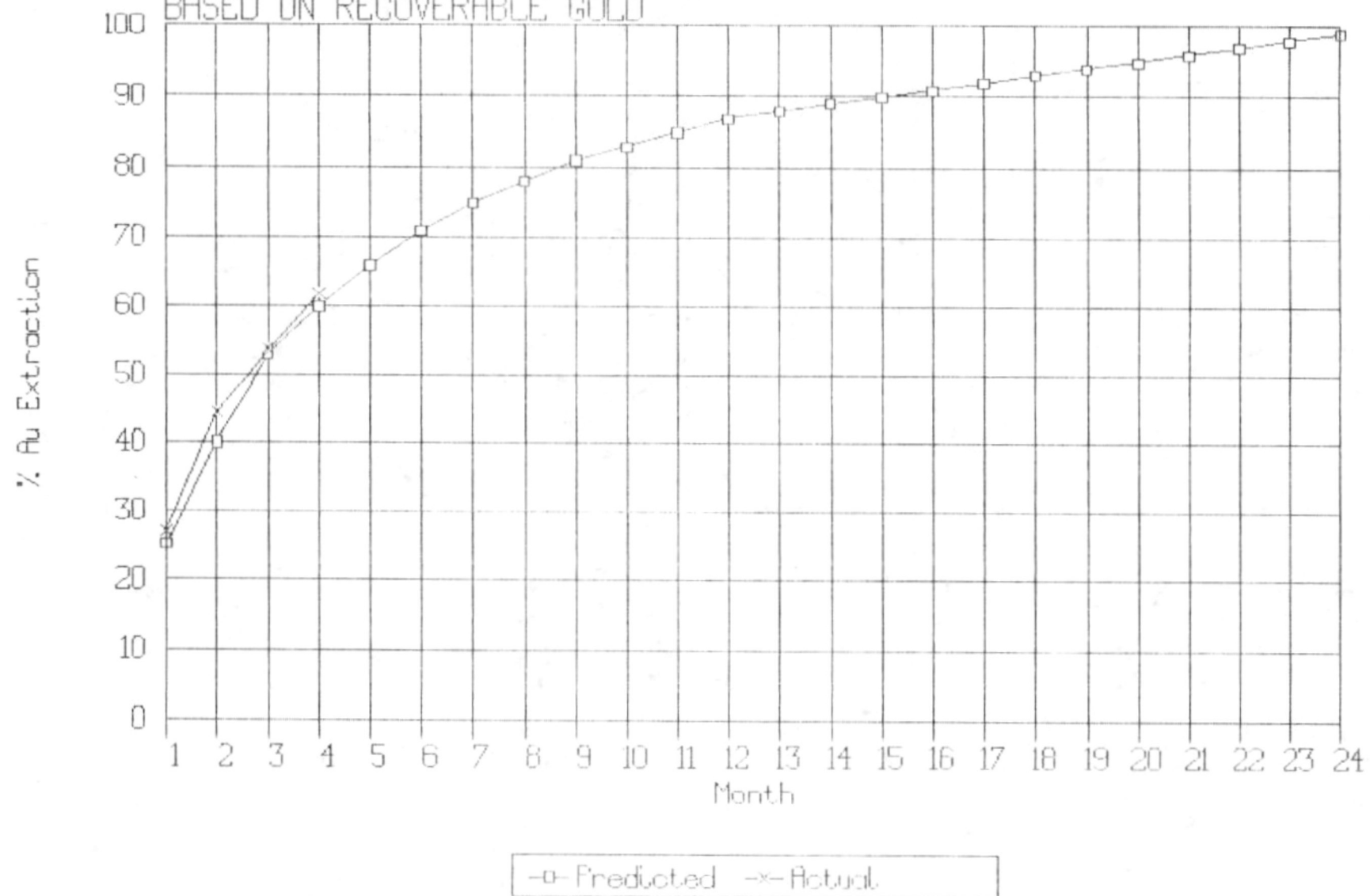
GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL



GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL
BASED ON RECOVERABLE GOLD



DATE: JANUARY 13, 1993
 TO: JIM THOMPSON
 FROM: LAURA DAMON LLD
 SUBJECT: SULFIDE TEST HEAP UPDATE - DECEMBER 1992

* RECOVERY

As of December 31, 1992, the Sulfide Test Heap (STH-5) has been on leach for 97 days. STH is showing a "Total Gold Basis" recovery of 30.3% and a "Recoverable Gold Basis" recovery of 55.3%.

Date	Leach Day	% Au Rec		% Au Rec	
		Total Basis	Recoverable Basis	Actual	Predicted
		Actual	Predicted	Actual	Predicted
10/26/92	31	15.2	14	27.8	25
11/26/92	62	24.5	22	44.8	40
12/26/92	92	29.5	29	54.0	53

The actual recoveries continue to run slightly higher than what was predicted. Up to 5% of the side slope ore is still not under leach due to the instability of the heap. This could retard the recoveries by about 2%.

* STH-5 EFFLUENT

Date	Leach Day	pH	Cumulative
			NaCN Consumption (lb/Ton Ore)
09/30/92	5	7.4	.043
10/31/92	36	8.0	.402
11/30/92	66	7.9	.676
12/31/92	97	8.2	.917

The STH effluent pH has been increasing slightly and is now maintaining a pH above 8. The "ON" solution pH continues to average about 9.8. The NaCN consumption is still partially due to the low pH coming from STH-5, although the effluent NaCN is up to >.5 lb/Ton. It was decided that the difficulties in using 50% NaOH to raise the pH of the "ON" solution (i.e. getting the drums to the usage site & providing adequate heat) outweighed the benefits of raising the pH at this time. It appears that the bulk of the copper has been leached as of the beginning of Dec.

*COST

Year to Date Expense:	\$479787.92	(corrected from November)	+ \$12,454.62 = \$492,242.54
\$/Ton Ore:	\$12.09	(corrected from November)	\$ 12.41
\$/Oz Prod:	\$615.79		\$ 631.78

*PHYSICAL ASPECTS

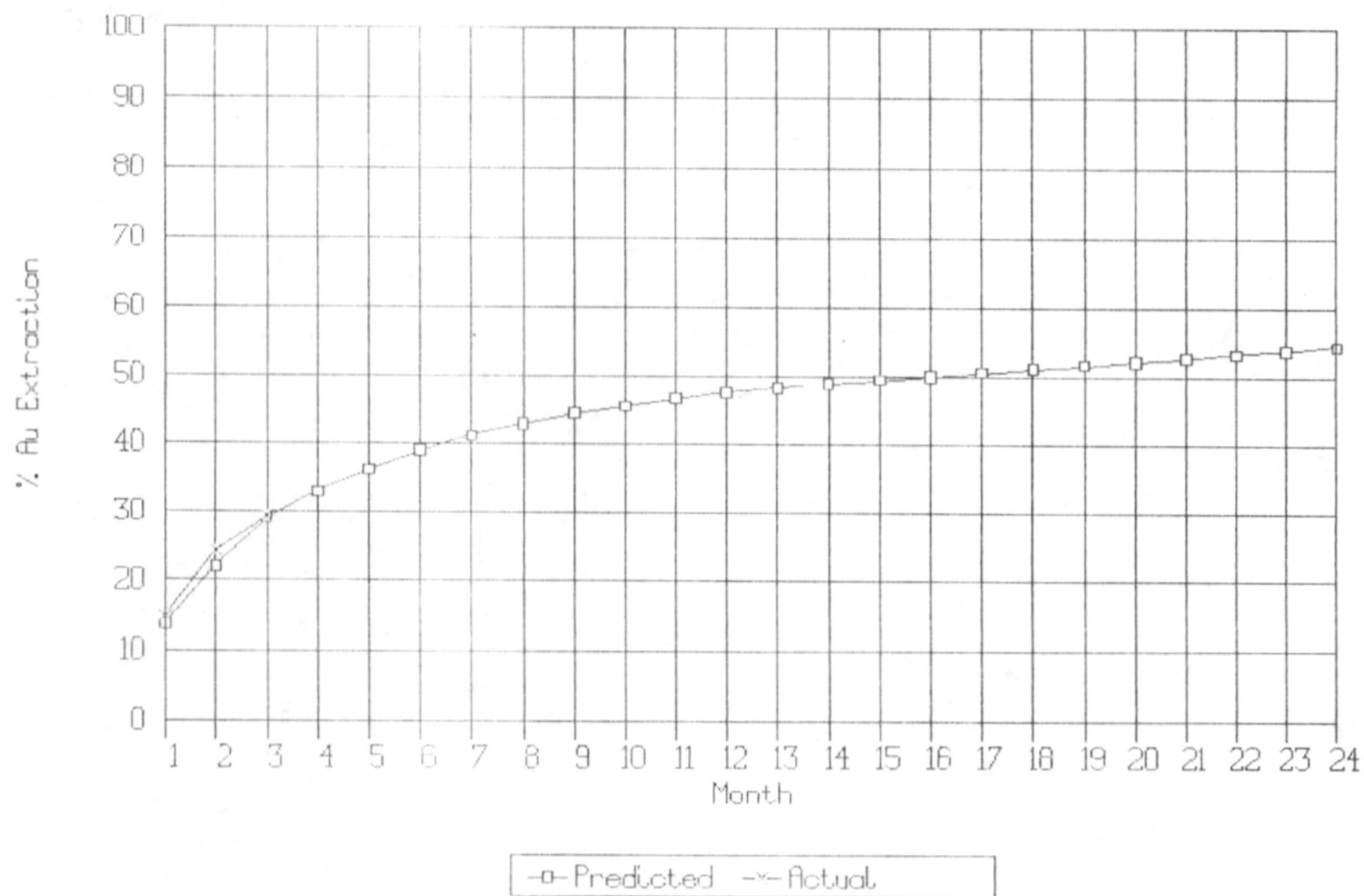
The stability of the heap continues to be questionable. The south side of the heap is still not under leach at present.

*OTHER

The progress of STH-5 was discussed with Steve Banning (Pegasus). He supported the notion that NaCN consumption is erroneously high due to the low pH in the heap. He also surmises that the slight retardation in the recovery curve for December may be a reflection of the colder temperatures and we will see a bump in recovery in the spring. He thinks it is possible to get to the projected 55% total recovery in the first year as opposed to a two year schedule.

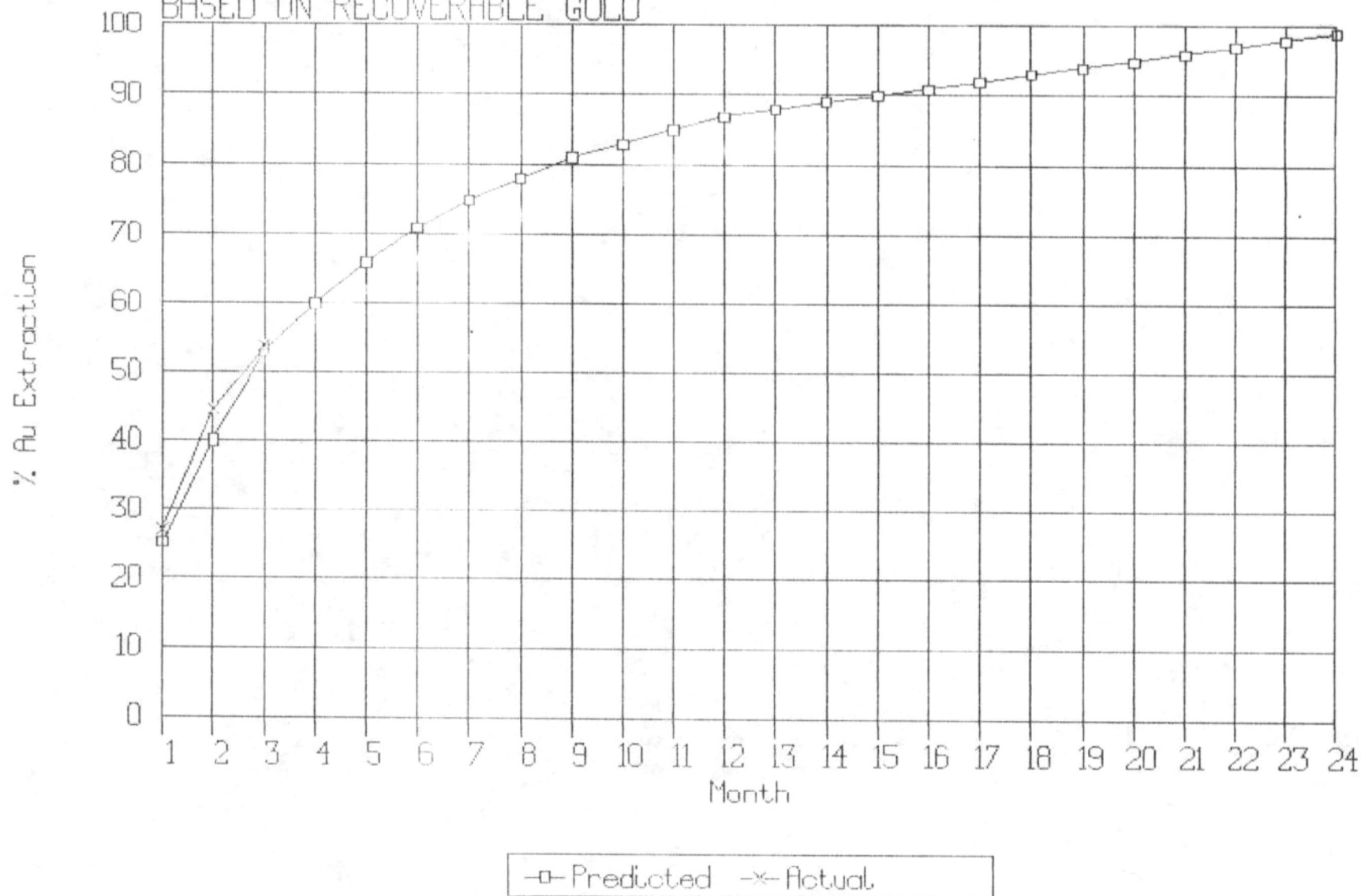
GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL



GILT EDGE SULFIDE HEAP LEACH TEST

PERCENT GOLD EXTRACTION - PREDICTED VS ACTUAL
BASED ON RECOVERABLE GOLD



DATE: DECEMBER 16, 1992
 TO: JIM THOMPSON
 FROM: LAURA DAMON *LD*
 SUBJECT: SULFIDE TEST HEAP UPDATE - NOVEMBER 1992

* RECOVERY

As of November 30, 1992, the Sulfide Test Heap (STH-5) has been on leach for 66 days. STH is showing a "Total Gold Basis" recovery of 25.2% and a "Recoverable Gold Basis" recovery of 46.1%.

Date	Leach Day	% Au Rec Total Basis Actual	% Au Rec Total Basis Predicted	% Au Rec Recoverable Basis Actual	% Au Rec Recoverable Basis Predicted
10/25/92	30	14.8	14	27.1	25
11/24/92	60	24.1	22	44.2	40

The actual recoveries are running slightly higher than what was predicted. It is thought that maybe up to 5% of the side slope ore is not under leach due to the instability of the heap. This could retard the recoveries by about 2%.

* STH-5 EFFLUENT

Date	Leach Day	pH	Cumulative NaCN Consumption (lb/Ton Ore)
09/30/92	5	7.4	.043
10/31/92	36	8.0	.402
11/30/92	66	7.9	.676

The STH effluent has been maintaining a pH of about 8 while the "ON" solution has been averaging a pH of 9.8. It would take approximately 192 gal/day of 50% NaOH to raise the pH of the "ON" solution to 10.5 in the entire leach circuit or about 30 gal/day to raise the "ON" solution for STH-5 only. Heat would have to be applied to the NaOH to make it free flowing. The NaCN consumption is partially due to the low pH coming from STH-5.

*COST

Year to Date Expense: \$468510.97
 \$/Ton Ore: \$16.57
 \$/Oz Prod: \$721.35

*PHYSICAL ASPECTS

-Stability: The stability of the heap is poor during snow-melt, particularly on the south side. The heap is holding together while it is frozen but wash-out problems will occur most likely when the weather warms up and especially during the rainy season.

-Drips: Emmiter lines are on the sides of the heap as dictated by the stability of the heap. The south side of the heap is not being leached at present.